

Collector's Edition
Number 100
November 1992
COMPUTER GAMING WORLD
47209
100th ISSUE
OCCASION
EMPEROR
REQUESTS
PRESENCE
GAMING WORLD
100th ISSUE
USA $3.95
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COMPUTER GAMING WORLD



On the Cover

With sound-blasted trumpet flourishes and luxuriantly decorated halls, the Golden Emperor invites you to sample the richness of CGW's 100th issue. This special Collector's Edition features a computer-generated cover by illustrator Mark J. Ferrari. Conceived by editor Johnny Wilson, the rendering portrays Golden Emperor (publisher) Russell Sipe, vizier Wilson at left, proud chef Ken Brown, and elven cake-bearers Alan Emrich, "Ranger" Chris Lombardi, Dawn Thompson and Mike Weksler. Ferrari did two weeks worth of work in only four days for the image—twice as long as any previous computer image he had created. "When you turn people green and raise their eyebrows half a foot, it's a challenge to maintain their likeness," he observed. The piece is Ferrari's first computer artwork intended specifically for print. He painted over electronic scans of the faces. Long gradients and intense anti-aliasing helped minimize pixelation in the approximately 640x480 pixel image. The work was created in Deluxe Paint II Enhanced by Electronic Arts. Mark's palette is a 386/33, his brush a mere mouse.



Mark Ferrari



3900 Games Later, page 8

Features

COMPUTER GAMING WORLD

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Computer Wargaming World



Car & Driver, page 136

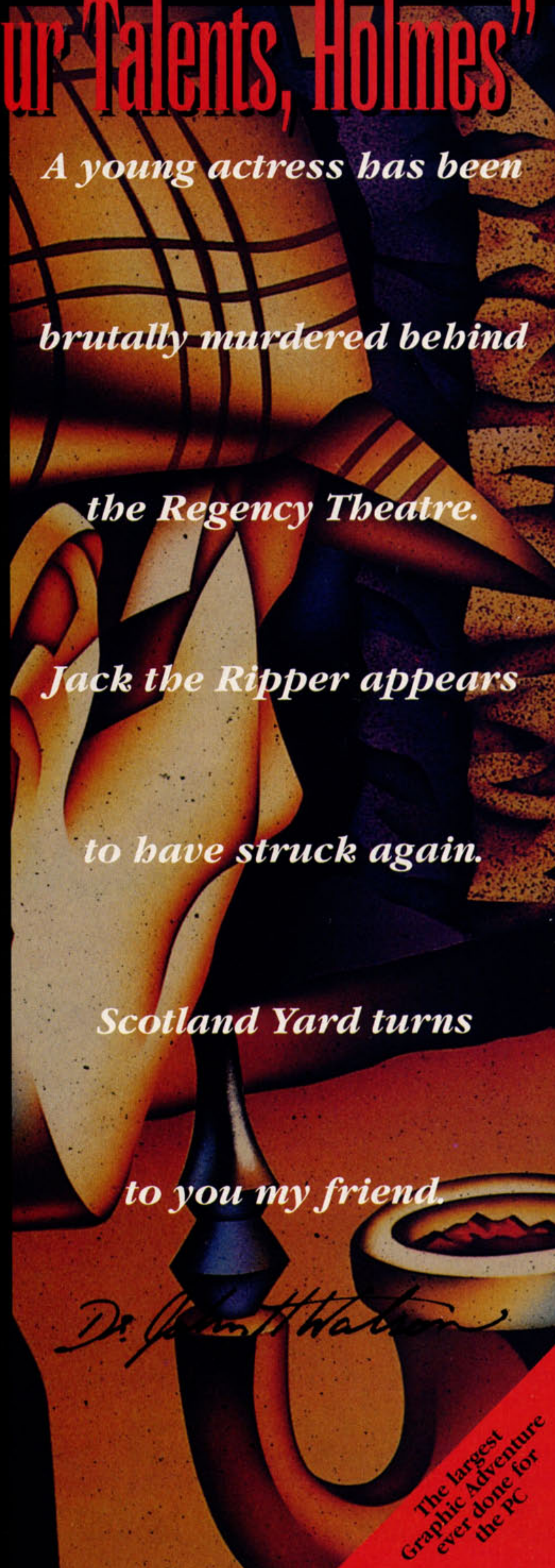


Guy Spy, page 124

Departments

"A Case Worthy of Your Talents, Holmes"





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Dr. John H. Watson

Interact with dozens of unique characters, each with their own personalities — and alibis



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•

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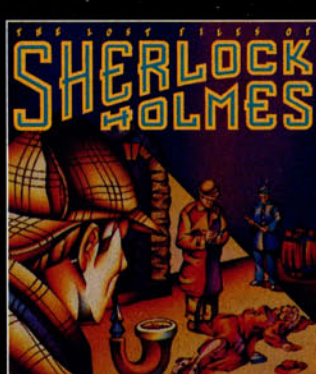
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ELECTRONIC ARTS®



3900 GAMES LATER...

by Russell Sipe

Sometime in early summer of 1981 the first review copy of a computer game arrived on *Computer Gaming World*'s doorstep.

Unfortunately, we did not keep an accurate log of arrivals back then. We wish we could remember which was the first game to arrive at CGW. Perhaps it was Muse Software's *Robotwar*. This game was popular enough with the CGW staff that in our early years we sponsored a series of annual Robotwar tournaments. Robotwar has spawned a couple of offspring in last couple of years. Origin Systems *Omega* and Maxis Software's *Robosport* are spiritual descendants or the original. Or perhaps *Castle Wolfenstein*, another Muse Software product, was the first to arrive. This year, eleven years later, Castle Wolfenstein has been updated to 1992 standards and has been re-released. As they say "what goes around comes around."

What "comes around" this month, some 3900 review copies later, is the 100th issue of Computer Gaming World. The staff of CGW takes great pride in this accomplishment. Most magazines are part of a larger stable of titles within their publishing company. CGW is somewhat different. For eleven years the staff of Golden Empire Publications put all their efforts and affection into one magazine, CGW. It is with particular pride that our staff celebrates this milestone.

It is also with great pride that at the same time we celebrate the 100th issue of Computer Gaming World, we celebrate the addition of a sister publication. Shipping almost simultaneously with this issue of CGW is the first issue of our new publication *Kids & Computers: A Magazine for Parents*.

Recently CGW introduced "Once Upon a Time", a column on the history of computer gaming. In the tradition of "Once" but with a broader view, this twelve page article looks back at the history of computer gaming as seen through the pages of 100 issues of the world's oldest computer gaming magazine: Computer Gaming World.


Hell hath no fury like the wrath of a woman scorned.
LURE OF THE Temptress™
Join the King's army in a perilous mission to free the people of Turnvale and restore peace to the land.
Your fate is decided when you fall in battle— you become a prisoner of the Temptress and her evil Skorl warriors.
Explore your surroundings as you unravel the mystery behind the Temptress and her diabolical plots.
In the world of Virtual Theatre, other characters take on a life of their own. You never know what may happen...
Slowly, you open your eyes in the dim light and begin to take in your surroundings. The rough stone walls... the filthy straw mattress under a flickering, smoky torch... the barred window and massive oak door. Obviously, this isn't the guest suite. The peaceful land of Turnvale has been seized by the enchantress Selena... and so, it seems, have you. Enter the world of Virtual Theatre™, an innovative new graphic adventure system where fantasy becomes reality and characters take on a life of their own. You assume the role of Diermot, an unlikely hero caught up in a web of sorcery and intrigue. Match your wits against the cruel Temptress and her monstrous creatures, the savage Skorl. Just who is this mysterious Selena— and what is she after? The answer to these questions lie hidden in Lure of the Temptress.
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vt virtual theatre
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REVOLUTION
Circle Reader Service #84

THE WORLD OF COMPUTER GAMING 1981

3900 GAMES LATER...



Vol.1 No. 1 Nov.-Dec. 1981

Number One



The most significant release of the year was the first installment of the now classic *Wizardry* series. Andrew Greenberg and Robert Woodhead put two and a half man-years into *The Proving Grounds of the Mad Overlord* which was the number one rated game in the CGW Poll for a span of 18 months.



The Major Players in 1981

Adventure International
Scott Adams made a name for himself in the late 70's and early 80's not only for producing the commercial version of *Adventure*, but also for heading one of the most prolific computer game companies of the time (specializing in the classic text adventure format).

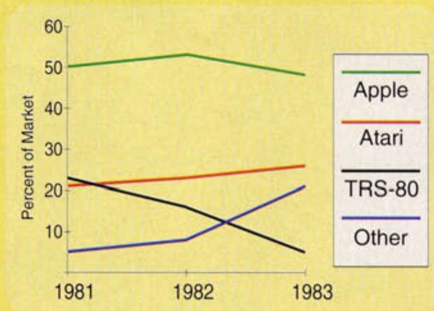
Automated Simulations (Epyx)
In 1978 Jim Connelley bought a Commodore PET to do bookkeeping chores for a D&D campaign he was running. Jim decided that a good way to write off the purchase would be to design a computer game and sell it. He invited one of his D&D players, Jon Freeman, to write the game with him. They completed the game and had to think up a company name. Jim came up with "Automated Simulations". Their first copy of *Starfleet Orion* sold in December 1978 thus giving Jim his write-off. In 1982 the company would change it's name to Epyx.

The Avalon Hill Game Company
Long the leader in the board gaming hobby, Avalon Hill formed their Microcomputer Games Division in 1979 when they released four titles: B-1 Nuclear Bomber; North Atlantic Convoy Raider; Nukewar; and Planet Miners. By Fall of 1981 their list had grown to a dozen releases with Tanktics being the best.

Broderbund
Attorney Doug Carlston used a TRS-80 to design Galactic Saga. He and his brother Gary formed Broderbund and, like many companies at that time, packaged their products in ziplock bags. Today their educational and entertainment products are known world wide. The Carmen Sandiego series has consumer recognition well beyond the world of computer gaming.

Hayden Computer Software
Between their Hayden line and their Programma International line, Hayden Software produced many titles in late 70's and early 80's, the most notable being Sargon I, II, and III.

Computers on the Move



Apple games dominated the years 1981-1983. Atari was the number two machine. It was a time of decline for TRS-80 games and growth for two new machines, the IBM and C-64. Most of the games in the Other catagory are a fairly balanced mixed of the two (the Radio Shack Color Computer & Vic-20 made up most of the rest).

Disk Drives vs. Tape Players

These days we are watching the seemingly slow move from floppy to CD based computing. In 1981 diskettes were in the final stages of overthrowing cassettes as the consumer's medium of choice for data storage.



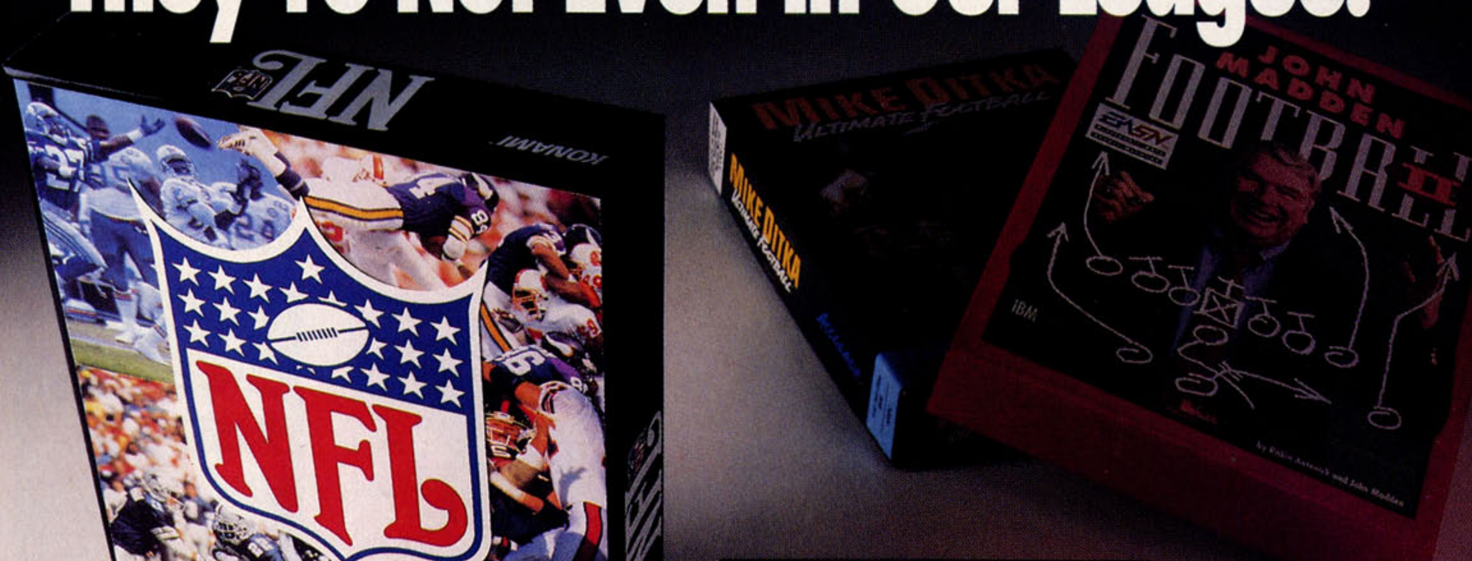
Muse Software
Muse Software's *Robotwar* and *Castle Wolfenstein* are two standouts of the time that still influence computer gaming in our day.

On-Line Systems
Ken and Roberta Williams developed their first computer game, *Mystery House*, at their kitchen table using an Apple II computer and graphics tablet. They formed On-Line Systems, to be renamed Sierra On-Line and have made it one of, if not the premier computer game companies.

Sirius Software
Sirius was a big name in arcade style games. A commitment to developing cartridges for 20th Century Fox Games provided Sirius' undoing when the arcade crash of 1983 hit.

Strategic Simulations
Much like CGW, SSI was started by a gamer who saw an opportunity to turn his hobby into a business. After Avalon Hill and Automated Simulations expressed no interest in his designs, Joel Billings (who still runs "miniatures" campaigns in his office after hours) started SSI to produce computer wargames. *Computer Bismarck*, which was orginally designed on a Northstar Horizon was released for the Apple II in February 1980. The rest is history (or fantasy, depending upon your viewpoint).

They're Not Even In Our League.

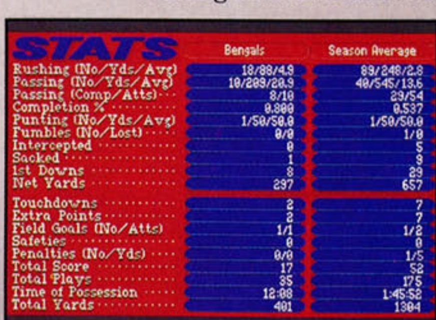




< Unrivaled realism in every detail from unpredictable ball bounces, diving tackles and audibles, to NFL draft, trades, and digitized gridiron sounds.

Introducing a new football dynasty. NFL from Konami.® It does more than out-class the competition. It gives you depth, detail and authentic NFL action that's in a league by itself.

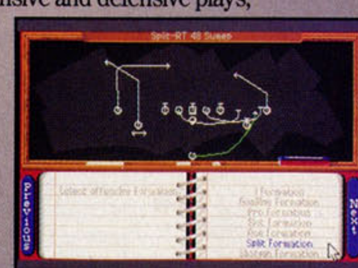
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- ☆ Only NFL can call 22 different penalties.
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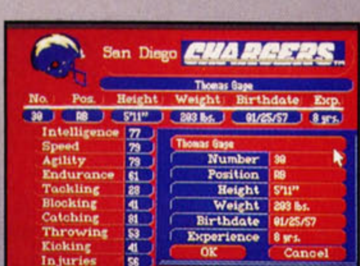
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3900 GAMES LATER...

THE WORLD OF COMPUTER GAMING 1982



Vol.2 No.1 Jan-Feb 1982

BIG ~~CELLAR~~ SELLER



According to a summer 1982 CGW survey of 150 game manufacturers, *Zork I: the Great Underground Empire Part I* was the top selling computer game (having sold 32,000 copies by June 30 of that year). *Zork III* was released later in the year bring to a conclusion the Zork trilogy. Infocom went on to produce another 32 games including this year's *Leather Goddesses of Phobos 2.*

NEW KIDS ON THE BLOCK



Access Software

In 1982 Bruce Carver bought a C-64 from a Salt Lake City computer retailer. He wanted to learn how to program sprite graphics. Since the C-64 manual didn't deal with multi-colored sprites Bruce wrote a sprite program for his own use. It was so good he started selling it as *Spritemaster*. He made tape copies one at a time until his retailer, Steve Witzel (now Marketing Director at Access), built a device that allowed them to make six tapes at a time. They thought they were in fat city. Several months later they landed a $6000 order for Spritemaster programs. They spent a lot of time copying. "Now we need a computer game" said Steve. Bruce went to work on *Neutral Zone* (a typical arcade game of the period). Ten years later they continue to push the state of the art and are best known for developing *Real Sound* and the *Links* line of golf games.

Electronic Arts

Trip Hawkins graduated with high honors from Harvard with a specialization in "Strategy and Applied Game Theory" and in 1975 had the stated goal of starting a game software company before 1985. After receiving a MBA at Stanford, he joined Apple Computer early in its growth and left the company in Spring of 1982 after serving as Director of Marketing for Apple's LISA computer. One of a number of sharp thinkers who walked away from Apple as millionaires Trip laid the groundwork for EA. After visiting Computer Gaming World's offices to discuss the state of the computer game industry Trip took a three month tour of Europe. On his return he formed Electronic Arts and signed up some of the most talented designers of the day.

Lucasfilm Games

In 1982 Atari provided a one million dollar grant to Lucasfilm to produce games for the Atari home computer. Lucasfilm had wanted to use the group to develop experimental technology for when film and computer tecnology came together (in reality, Industrial Light and Magic ended up filling this need) and produce educational games that would capture the imagination of the young like the Star Wars films had. It took over two years for the first two products (*Rescue on Fractalus* and *Ballblazer*) to be readied for market. When the games were completed, however, Sam Tramiel bought Atari. Tramiel was not interested in publishing the games. It took another year for the games to see the light of day under the Epyx label.

MicroProse

In summer 1982 Bill Stealey was a employed as a strategic planner. During a break in a company meeting in Las Vegas "Wild Bill" was challenging all comers to beat his score on a coin-op game called Red Baron (no relation to the *Red Baron* game from Dynamix). A programmer at the same firm named Sid Meier waxed Bill's tail on the game. Meier explained to a chagrined Stealey that it was all a matter of observing the rudimentary A.I. of the enemy pilots then "ambushing" them. Sid boasted that he could design a better game in a week on his home computer. Bill told him that if Sid could do it, he (Bill) would sell it. The result (two months later) was *Hellcat Ace*. They formed Microprose and embarked on a course that would bring them fame and fortune.

1982 CGW Poll Top Five

1. **Wizardry I (Sir-Tech)**
2. **Computer Baseball (SSI)**
3. **Olympic Decathlon (Microsoft)**
4. **Guadalcanal Campaign (SSI)**
5. **Choplifter! (Broderbund)**

December 1982



Plan 9 Stolen From
Studio Archives!
UNSPEAKABLE HORRORS FROM OUTER SPACE PARALYZE THE LIVING AND RESURRECT THE DEAD!
PLAN 9 FROM OUTER SPACE
with BELA LUGOSI VAMPIRA LYLE TALBOT
A J. Edward Reynolds Production
Produced and Directed by Edward D. Wood, Jr.
Okay bud, listen up, here's why I called you. I've mislaid a few reels of my noo movie, and I need 'em back. That's where you come in.
She's a bit pale looking, but you're particularly drawn to her beautiful red fingernails.
This is a corpse. He looks remarkably fresh. A little piqued and pale but fresh.
Plan 9. The critics hated it. Bela Lugosi died during it. And his double has stolen it.
Lugosi's replacement is still bitter after 33 years from critics' reviews dubbing his only movie "The Worst Film of All-Time." Even though he remained faceless, he intends to bring glory to the cult classic using more footage of himself and... **colorizing** it. As the studio's Private Eye you'll search over 70 locations, find the 6 reels and screen the film, frame-by-frame, to ensure that the warped actor did not cut Bela from the flick. Using actual digitized film footage, you'll sweat each scene, examining **Plan 9** with slow motion, freeze frame, fast forward and rewind. It's up to **you** to preserve its original awfulness. **Available for MS-DOS & Amiga.**
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Vol.3 No.4 Jul-Aug 1983

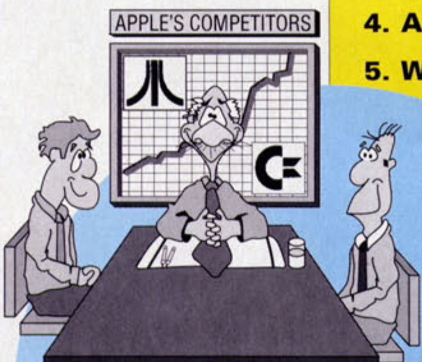
THE WORLD OF COMPUTER GAMING 1983

3900 GAMES LATER...

1983 CGW Poll Top Five

1. **Wizardry I (Sir-Tech)**
2. **Combat Leader (SSI)**
3. **M.U.L.E. (Electronic Arts)**
4. **Archon (Electronic Arts)**
5. **Wizardry II** Knight of Diamonds

December 1983



Of Games And Machines

Although the Apple II computer would continue to dominate floppy based computer gaming for another two years, 1983 signaled the beginning of it's decline. The Atari 400/800 became the machine of choice of several companies during the period 1983-1984 and the C-64 which was released in 1982 started coming on strong in '83. Lurking in the background but slowing building up momentum was the IBM.

An Industry First

The world's first computer game convention was co-sponsored by CGW. It was held in Southern California on Labor Day weekend 1983. SSI sponsored a Computer Game Penthalon (play 5 SSI games for a combined score). Speakers came from SSI, Avalon Hill Game Company, Softline (a computer gaming magazine from the early 1980's), Electronic Arts, and Computer Gaming World.

Today, computer gaming mini-cons within larger board/adventure game conventions are common place.



STRATEGICON INC. in conjunction with COMPUTER GAMING WORLD presents

MICROCON

A computer game mini-convention featuring

• THE STRATEGIC SIMULATIONS INC. PENTATHLON

• THE COSMIC BALANCE TOURNAMENT

• COMPUTER GAME SEMINARS



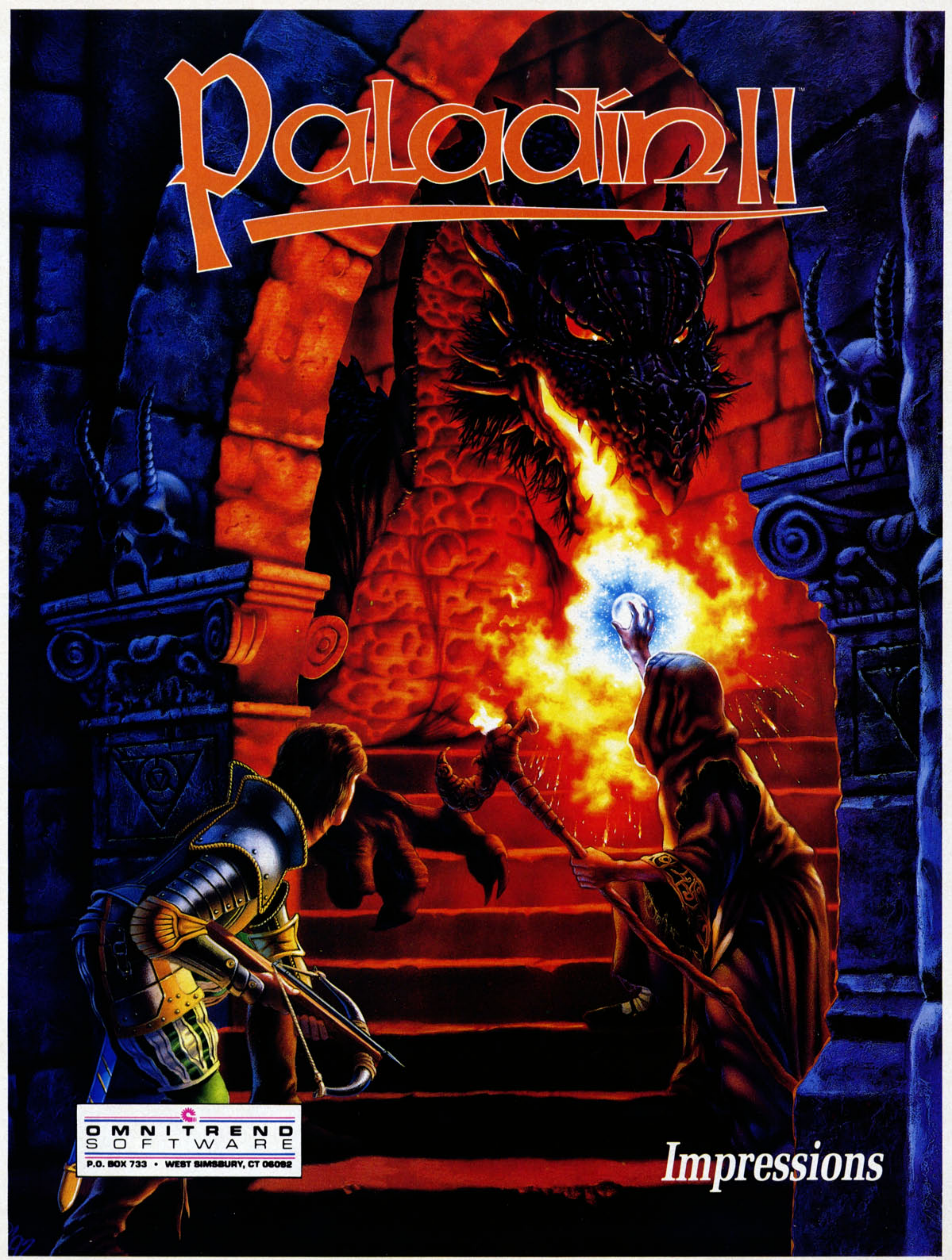
THE "Image" Ad



Electronic Arts released their first products in May 1983. As part of that launch EA produced the above "image" ad which ran in numerous publications including CGW. The ad, printed as a 14"x19" detachable poster remains to this day THE best example of "image" advertising in the computer entertainment industry. The poster features the "software artists" behind EA's initial releases: Mike Abbot and Matt Alexander (two guys on left side) designed *Hard Hat Mac*; Dan Bunten (second from left top row) did *M.U.L.E.*; John Field (bottom row second from left) did *Axis Assassin*; Jon Freeman (third from left, top row) and Anne Westfall (second from right, top row) did *Archon*; Bill Budge (top row, far right) was the author of *Pinball Construction Set*; David Maynard (arms folded) wrote Worms?

The ad copy starts with this statement: "Software artists? It is a name these people are uncomfortable with. 'I'm not so sure there are any software artists yet', says Bill Budge. 'Maybe we've got to earn that title'".

Did EA's designers go on to earn the august accolade "artist" in terms more real than advertising copy? It depends. Certainly Electronic Arts dominated the mid and late 1980's with their "New Hollywood" studio design concept. Some of the most talented people in the history of computer entertainment applied their talents to EA products. These days, however, EA is better known as a leading distributor of other people's designs and products than as a community of software artists. Today, EA and other companies that "see farther" are busily forming the strategic alliances that will prepare them to engage the "New Hollywood" in a more literal sense where film, television and computer game "artists" may form a new interactive entertainment.


Paladin II
OMNITREND SOFTWARE
P.O. BOX 733 • WEST SIMSBURY, CT 06092
Impressions



Vol.4 No.3 June 1984

THE WORLD OF COMPUTER GAMING
1984

3900 GAMES LATER...

1984 CGW Poll Top Five

1. **7 Cities of Gold (EA)**
2. **M.U.L.E. (EA)**
3. **Wizardry I (Sir-Tech)**
4. **Ultima III (Origin)**
5. **Fighter Command (SSI)**

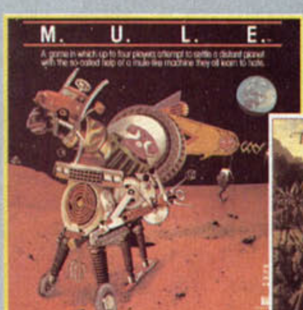
December 1984

SURVEY SAID

According to a 1984 survey the following percentage of CGW readers played games of that catagory at least five times per month. The totals are greater than 100% because a large number of readers played more than one catagory of games at least five times a month.

Adventure	64%
Wargame	73%
Arcade	53%
Abstract	12%
Sports/Other	39%

Dan's Duo





1984 was Dan Bunten's year. One of the original "software artists" from the EA "We See Farther" ad, Dan produced two outstanding hits for Electronic Arts in 1983-1984. *M.U.L.E.* and *Seven Cities of Gold* were top rated games all year long among CGW readers. In an industry where last year's hit is this year's old technology, M.U.L.E. and Seven Cities holds up well against the current crop of designs. Good game design is not made obsolete by new technology.

Fortunately for those of you that weren't hanging around the hallowed halls of computer gaming back in the early eighties, rumor has it that M.U.L.E. is being updated. Keep your eyes peeled. If the update is faithful M.U.L.E. should again appear in the Computer Gaming World Top 100 (and probably near the top).

CRASH GO THE CARTS



In 1983 the video game industry hit the skids and by 1984 had gone over the cliff. A series of poor management decisions at Atari (Atari VCS and 5200 System) combined with competition from Mattel (Intellivision) and Coleco (Colecovision) put Atari in a precarious position. At Christmas 1982 Atari had ten million dollars worth of unsold merchandise sitting in a warehouse in Taiwan, not to mention the pieces to make five million E.T. carts. On December 8 Warner's stock lost 33% of it's value. It didn't recover. Other cart companies were affected as well. By 1984 the video game industry would be a shadow of it's former self.

Into this chaos stepped Commodore with their hot new little home computer, the C-64. The C-64 would become the fastest growing computer in gaming in during the years 1983-1985.

Meanwhile, of the 18 computer and/or video game magazines serving the computer game and video game hobby in 1983 all but *Computer Gaming World* disappeared over the next couple of years.

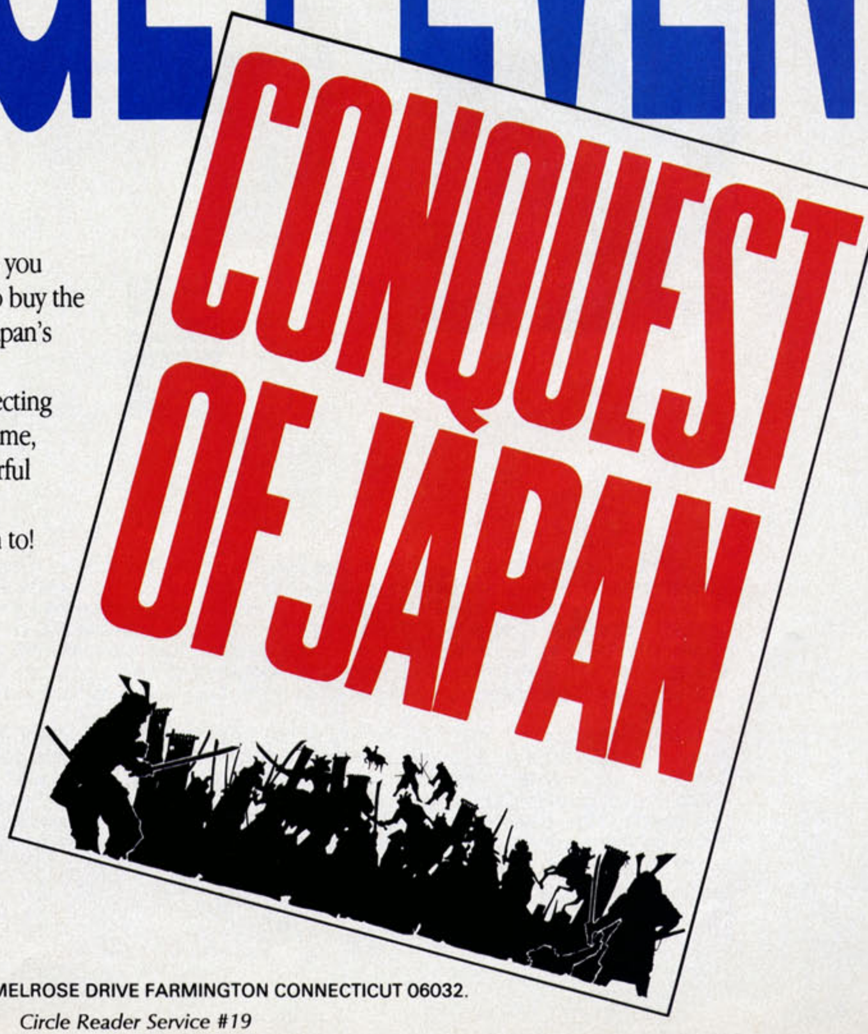
DON'T GET MAD... ...GET EVEN!



Watch with pride as your warriors move into intricate formations (HIGH RESOLUTION mode IBM PC only).



The game is full of sumptuous graphics.



Your Chance to get your own back! Conquest of Japan gives you five cities, each with money to hire armies -it is up to you to buy the right soldiers, and direct your armies to conquer Honshu, Japan's main island! In a truly epic production, you are both the general,planning campaigns, and the army commander, directing troops within each battle. All battles are played out in real time, with your soldiers moving into formation in fantastic, colourful animation! You can become as involved as you like -from watching progress, to instructing individual men if you wish to! You can even choose to play each battle in Hi Res (386/25 machines or better reccommended) or faster Low Res.

FEATURES:

- *Miniature-style war simulation*
- *Cities located differently each game*
- *Choice of authentic troop formations*
- *Simple to play*
- *Your chance to conquer Japan!!*

Impressions IMPRESSIONS SOFTWARE INC. 7 MELROSE DRIVE FARMINGTON CONNECTICUT 06032.

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3900 GAMES LATER...

THE WORLD OF COMPUTER GAMING 1985



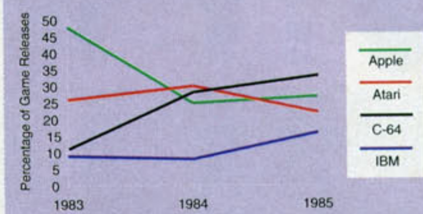
Vol. 5 No. 2 Apr-May 1985

1985 CGW Poll Top Five

1. Kampfgruppe (SSI)
2. Wizardry I (Sir-Tech)
3. Mech Brigade (SSI)
4. Ultima III (Origin)
5. M.U.L.E. (Electronic Arts)

December 1985

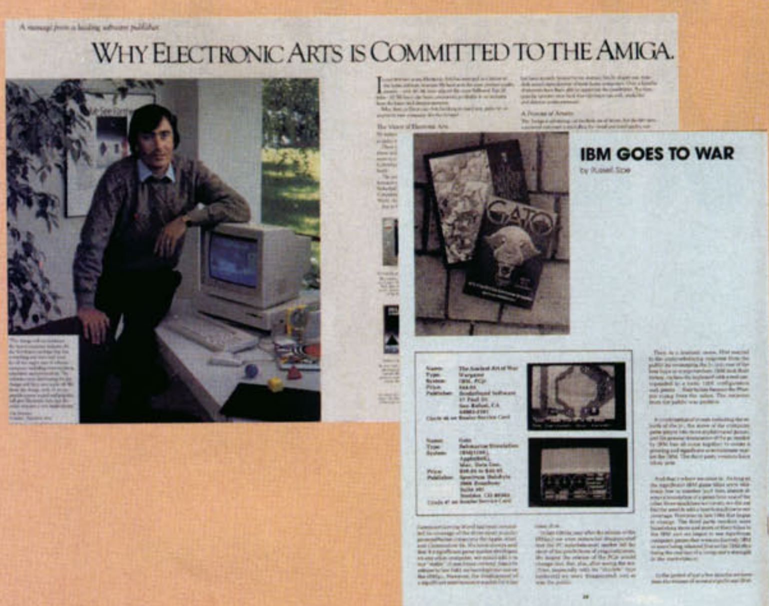
Computers On The Move



The installed base of C-64s rose dramatically in 1983-1984. A lot of those video gamers that abandoned the cartridge market latched onto affordable C-64s. The publishers responded vigorously with translations and orignal designs for the C-64. In two years the C-64 tripled it's share of the market (measured by numbers of titles).

The Apple and Atari 400/800 were still major players, but on the wane. The IBM-PC was building steam. The Amiga was too new to have a significant impact on 1985 releases.

A Tale of Two Computers



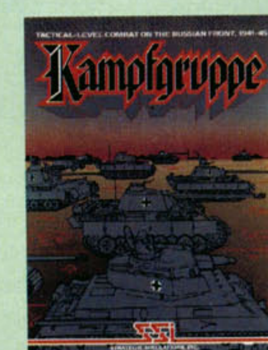
Hardware was the big story in 1985. The IBM-PC turned the corner (in spite of droping the PCjr) and became a development platform for several publishers. In an April 1985 article, "IBM Goes To War", CGW declared a commitment to IBM-PC coverage stating that "the era of IBM computer gaming has arrived."

The other big hardware development was Commodore's introduction of the Amiga computer. Greatly anticipated, the Amiga delievered graphics and sound capabilities unseen and unheard of to that point. It was cutting edge all around.

Electronic Arts embraced the Amiga whole-heartedly. EA President Trip Hawkins declared that "the Amiga will revolutionize the home computer industry... we think the Amiga with it's incomparable power, sound and graphics will give Electronic Arts and the entire industry a very bright future."

As great as the Amiga computer was and is, EA's vision was thrown out of focus by the less than cutting edge marketing and distribution the Amiga has received over the years.

Über Alles



Kampfgruppe was the top rated game by CGW readers in 1985. SSI's simulation of tactical combat on the Eastern Front during World War Two was a landmark design.

Computer wargaming was still a strong catagory in 1985. However that was to change in time.

Discovery
IN THE STEPS OF COLUMBUS



In Discovery, *you* are the master explorer and adventurer: **Set Sail** into the distance, in search of new lands; **Explore** new worlds ; **Pirates** are everywhere - be prepared for sea battles; **Create Cities** -fell trees, build farms, forts, warehouses, schools; **Trade** the produce from your new world to buy new ships; **Fight** the other nations trying to establish their empire.

In 1492 Columbus discovered America - for God, Gold and Glory!

500 years later this is your chance to discover a new world!

FEATURES:

6 New Worlds to Discover

Piracy - mutiny & battles

Land & Sea combat

Simple point and click interface

8 ship types; 4 maps

5 competing nations

YOUR CHANCE TO DISCOVER AMERICA!



Animated people develop buildings all by themselves.



Watch your empire grow.



You will need to fight off pirates and more!

Impressions

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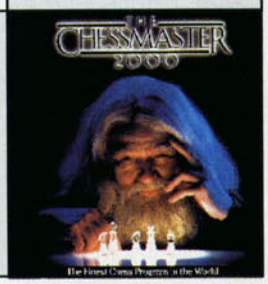
Circle Reader Service #78

THE WORLD OF COMPUTER GAMING 1986



Number 26 Mar 1986

Chess is Number One



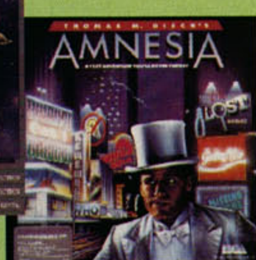
Actually, Chessmaster 2000 was #1 for only one month (December 1986). However, it stayed in the Top 10 until it's retirement to the CGW Hall of Fame (as a charter inductee). Chessmaster 2000 is the only chess game to ever make it to the top spot.

It Was a Dark and Stormy Night at the End of the Universe

1986 CGW Poll Top Five

1. **Chessmaster 2000 (EA)**
2. **Ultima IV (Origin)**
3. **Bard's Tale I (EA)**
4. **Kampfgruppe (SSI)**
5. **Silent Service (Microprose)**





The years 1984-1986 saw a number of writers, both famous and little known, get involved with "electronic novels". In a few cases the writers became inimately involved in the development of the product, in others it was more a matter of using the author's name and prior work and forcing it into a computer.

A few of the more successful projects (from a critical perspective) were Doug Adam's The Hitchhiker's Guide to the Galaxy from Infocom, Michael Crichton's Amazon from Spinnaker, and Thomas Disch's Amnesia from Electronic Arts. Synapse Software produced three electronic novels in which the reader/player reads the first chapters of the story in a hardbound book then goes to the computer for the balance of the game.

As a catagory electronic books have not been very successful.





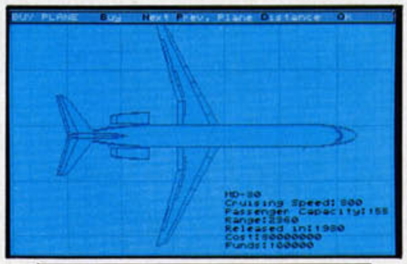
FULL MYLAR JACKET

The Vietnam War ended in 1975. The national trauma that followed in the U.S. dictated that, for years, Vietnam would not be the subject of "entertainment". It was not until the early 80's that Hollywood could turn to the subject in movies like *The Deer Hunter* and *Apocalypse Now*. Even these were not traditional works of entertainment. They were filled with the pain that was part of the trauma we were going through. Avalon Hill produced a game called *VC* in 1982 that made no one's list of favorite computer games. It was not until 1986-1988 that we were past the pain far enough to enjoy movies like *Platoon*, *Full Metal Jacket*, and *Good Morning Vietnam*. During that same period *Conflict in Vietnam* from Microprose and *NAM* from SSI appeared. Of the two, *Conflict in Vietnam* was the better game. *NAM* was too much like a WWII game set in the jungles and cities of Vietnam. In our coverage of *Conflict in Vietnam* a panel of gamer/vetrans including two brigadier generals and the editor of a major military encyclopedia gave their opinions on the game. Although the panel liked the game overall, one of their critcisms was the unrealistic victory conditions which were based on taking and holding objectives. Here is part of the discussion from CGW #26: "The most serious dispute (by the panel) was over victory conditions. How does one actually win the war in Vietnam? With the American emphasis on body count, the NVA also looked to American casualties as an indicator. While the panel preferred body count as a measure, Microprose's staff felt that "body count" was simply unmarketable and ghoulish. Unmarketable, yes; but then again, Vietnam was never intended to be a marketing man's dream."

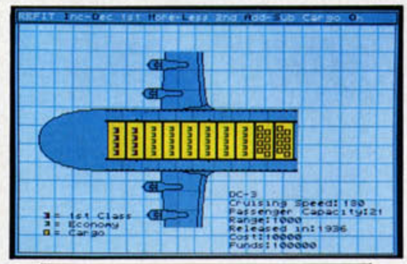
BUILD YOUR OWN AIRLINE!



- Develop your own global route network



- Buy the latest planes as new technology becomes available.



- You decide how to fit out all your planes.

Air Bucks is your chance to build an airline- it won't be easy, but if you make it the rewards are huge! Start with $100,000 and a DC3 in 1946, at the start of the air travel boom. Decide which places to fly to, where to use as a hub, when to buy new planes and which ones to buy. New planes become available over time, from a DC9 to Boeing's 747! But beware just because a plane is new does not mean it is right for you. You must also find the cash to pay for it; and planes don't come cheap! You are sure to need the help of your friendly bank sooner or later, or even to sell shares!

AIR BUCKS



- *1 to 4 players (human or computer)*
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- *World map can change every game.*
- *Fleet size larger than you're likely to ever need!*
- *Detailed Graph Chart and reprints*
- *Hi-Resolution Graphics supported (IBM PC).*
- *Easy to use point 'n' click interface.*



- You can even set the luxury level on your fleet.



- There's money to be made in cargo as well as passenger flights.



- Will you beat your rivals to this and other targets.

YOUR RUNWAY TO SUCCESS!

Impressions

Committed to Excellence in Strategy Entertainment

Circle Reader Service #79



Number 36 Apr. 1987

The World of Computer Gaming 1987

3900 GAMES LATER...

1987 CGW Poll
Top Five

1. **Gettysburg: Turning Point (SSI)**
2. **Ultima IV (Origin)**
3. **Pirates (Microprose)**
4. **Starflight (EA)**

TIE **Wizardry I (Sir-Tech)**

5. **Might & Magic (New World)**

December 1987

Please Release Me

"Horizontal releases" were *de rigeuer* in 1987. Most game titles from major publishers were released for Apple, C-64, and IBM. The Amiga and Atari 400/800 were often included in the release list as well. It was a year of maximum number of "machines supported". In prior years one machine would dominate the percentage of releases (first Apple then the C-64). After 1987 IBM would dominate.

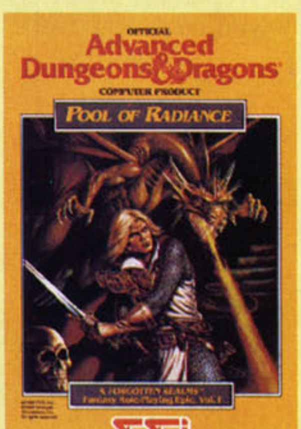


The Year of Adventuring Dangerously

Although *Gettysburg: The Turning Point* was the top rated game at the end of 1987, it had only edged out *Ultima IV* by 1/100th of a point. The real story is that five of the top six games were adventure/role-playing games according to CGW readers (December 1987). 1987 and 1988 were dominated by adventure and role-playing games.

Classic series such as *Ultima*, *Wizardry*, *Might and Magic*, *AD&D*, along with individual standouts like *Pirates* and *Starflight* (*Starflight II* came out in 1989) shaped the character of computer gaming in 1987 and1988.

SSI & TSR Do AD&D™



1987 was a watershed year for Strategic Simulations Inc. They rolled the dice and came up a winner when they signed an agreement to produce official AD&D computers games in co-operation with TSR Hobbies.

The first title, *Pool of Radiance*, kicked off what has become one of the most successful product lines in the history of the hobby. Computer wargamers felt that SSI had abandoned them since the number of wargame releases dropped after the deal was made. From SSI's viewpoint, however, the success of the AD&D line meant that they could continue to develop wargames even though they are not as profitable as adventure games.

SIT DOWN DITKA. MOVE OVER MADDEN.

TOM LANDRY STRATEGY FOOTBALL IS HERE!



The all-or-nothing decisions. The bone-busting action. The thrill of victory. It's all here in the most realistic pro football strategy game ever introduced!

Co-designed by one of pro football's greatest coaches, Tom Landry Strategy Football puts *you*



Enjoy "point-and-click" menus that make everything fast, fun and easy!



You'll thrill to super animation and sound effects as the action unfolds!

in the coach's seat. You'll choose from thousands of offensive and defensive formations. Then watch your plays unfold in eye-popping animation!

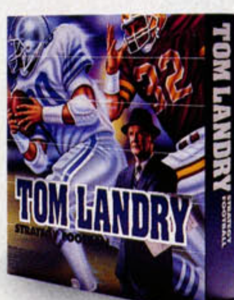
You can analyze in-depth game stats and scouting information. Make substitutions. Check weather conditions. Get on-line help, from the basics to advanced coaching tactics. And "Ask Landry" when you want advice from one of the best minds in the game.

Make the right decisions, and you'll coach your team all the way to a Super Bowl victory!

See if you've got what it takes to go the distance. *Order Tom Landry Strategy Football today!*



"Ask Landry" for advice from one of the greatest coaches of all time!



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Circle Reader Service #96

THE WORLD OF COMPUTER GAMING 1988

3900 GAMES LATER...



Number 51 Sept. 1988

1988 CGW Poll
Top Five

1. **Wasteland (Interplay)**
2. **Empire (Interstel)**
3. **Dungeon Master (FTL)**
4. **Pirates (MicroProse)**
5. **Stealth Fighter (MicroProse)**

December 1988



Although its window of influence was to last less than 18 months, EGA became the dominant graphics format for games in 1988. Sierra was already shipping EGA products and their lead was followed in early 1988 by EGA compatible releases from all of the major players by year's end. Who would have guessed that the shift to VGA would follow as fast as it actually did (see 1989).

SF Writers Blue Sky for CGW



In 1988 CGW interviewed a number of well known science fiction writers (Isaac Asimov, Doug Adams, Harlan Ellison, Alan Dean Foster, Roger Zelazny, Harry Harrison, Jerry Pournelle, and Steve Brust) to get their views on the possible futures of computer entertainment.

Although some of the wilder predictions have not come to pass, several predictions from our March, 1988 survey are coming true. Alan Dean Foster spoke of artificial realities at amusement parks; Harry Harrison talked about wall-sized monitors and multi-player D&D games (long before AD&D was available on America On-Line) with graphics; and Douglas Adams noted that games would have to become increasingly more "multimedia" in order to retain popularity.

Roger Zelazny pictured virtual reality games which would combine electroencephalography and biofeedback into the design. Not yet, but...

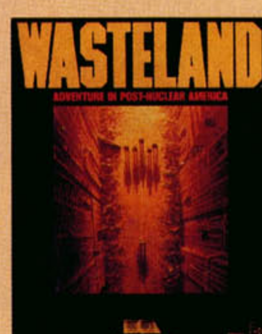




COMPUTER GAME DEVELOPERS CONFERENCE



The first Computer Game Developers Conference was a gathering of 26 designers in April, 1988. The conference was held at Chris Crawford's house and proved that there was interest in holding a larger and more lengthy conference. In September of 1988, the Miltipitas Holiday Inn was the site of the second Computer Game Developers Conference where more than 100 designers, programmers, artists and musicians gathered to discuss game philosophy, design constraints and personal experiences. Today, more than 500 members of the development community attend the annual conference.



1988's *Wasteland* was a favorite among CGW readers. The way in which *Wasteland*'s NPCs related to player characters, the questions of dealing with moral dilemmas, and the treatment of skills set this game apart. The post-holocaust quest blended science fiction and modern man-to-man combat into a classic mix of tactics and problem- solving.



Number 66 Dec. 1989

THE WORLD OF COMPUTER GAMING 1989

3900 GAMES LATER...



1989 CGW Poll Top Five

1. F-19 Stealth Fighter (MicroProse)
2. SimCity (Maxis)
3. Populous (EA)
4. Battlehawks '42 (Lucasfilm)

tie Red Storm Rising (MicroProse)

5. Lords of Rising Sun (Cinemaware)

December 1989



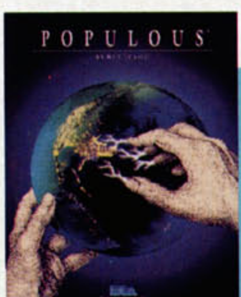
Did You Hear That?

1989 could very well be known as the year of the sound card. At the Summer Consumer Electronics Show, Sierra led the way by announcing their commitment to the AdLib, Roland and Creative Labs sound standards in all of their products, as well as marketing the soundboards through their direct mail catalogs. By year's end, six cards were competing for the market share with more on the way.

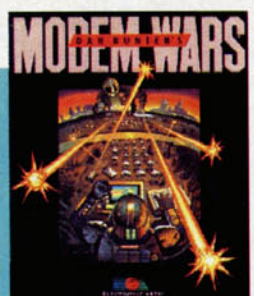
FIRST CD-ROM GAME



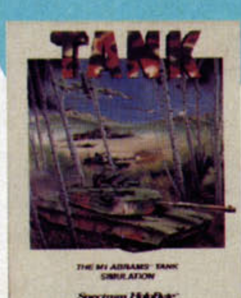
Activision's *The Manhole* was the first CD-ROM entertainment software to ship. Children were able to "point and click" their way through developer Cyan's version of an Alice in Wonderland gone even more wild. It was followed almost immediately by Cinemaware's *Defender of the Crown CD-ROM.*



Modem Mode



1989 marked the first wave of modem-to-modem games. Although Sierra's *3-D Helicopter Simulation* had appeared in 1987, it wasn't until 1989 that Electronic Arts brought out a half-dozen modemable titles and Spectrum HoloByte made its commitment that has lasted from *TANK* through today's *Falcon 3.0.*



It's VGA Time!





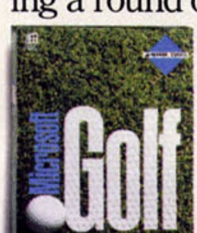
Although some computer games were labeled as being VGA compatible prior to mid-1989, most of them provided EGA resolution through the VGA board. By the end of 1989, however, most companies were releasing their premium titles as VGA (actually, many were MCGA (320x200) resolution, in order to get beyond the 16 color restriction of VGA's more precise (640x480) resolution).

The pictures above show the EGA and VGA versions of the same screen from Sierra's *Mixed Up Mother Goose.*

Get in 18 holes during lunch.



Or any other time you feel like playing a round of golf. All you need is a PC and Microsoft® Golf for Windows.™



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Using new Golf is practically like being right out on the course itself. We're talking heavy-duty realism. The fact is, you'd be hard pressed to find another golf game as realistic.

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For a limited time, when you pick up Golf, you can also pick up a *free* Microsoft Golf hat. So call (800) 323-3577, Dept. HL5.

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Microsoft

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Circle Reader Service #95



Number 70 Apr. 1990

THE WORLD OF COMPUTER GAMING

1990

3900 GAMES LATER...

1990 CGW Poll Top Five

1. **Their Finest Hour (LucasFilm)**
2. **Railroad Tycoon (MicroProse)**
3. **Ultima VI (Origin)**
4. **Harpoon (Three-Sixty)**
5. **SimCity (Maxis)**

December 1990



Apparently, many CGW readers believed that Larry Holland's second game of WWII aerial combat was their own "finest hour" because the game held record high ratings throughout much of 1990. Gamers enjoyed the ability to fly on both sides of the conflict, as well as the excellent bit-mapped graphics.



Another major goal in 1990 was the publication of computer games for people who never played computer games. The software publishers reasoned that the only way to expand their market was to introduce the hobby to new gamers and they used a variety of techniques to try to accomplish this. On the heels of the unparalleled success of *Tetris* in reaching non-gamers, Spectrum HoloByte unveiled an international series of puzzle games (*Welltris* from the Soviet Union, *Soko-Ban* from Japan and *Zig-Zag* from Britain); Taito announced *Puzznic* (a real-time sliding tile puzzle game) and *Arkanoid II: Revenge of DOH*; and Virgin Games released *SPOT*, a challenging abstract strategy game with delightfully frivolous animation.

Believing that the hobby needed more female gamers, Roberta Williams designed an "interactive play" with a female protagonist and more eavesdropping and observation than action (*The Colonel's Bequest*). An introductory-level adventure game, LucasArts' (nee Lucasfilm) *Loom*, used a musical staff and "point and click" interface to induce new players to give computer gaming a try. Sierra even tried the multimedia, multi-player strategy route with *Jones in the Fast Lane*.

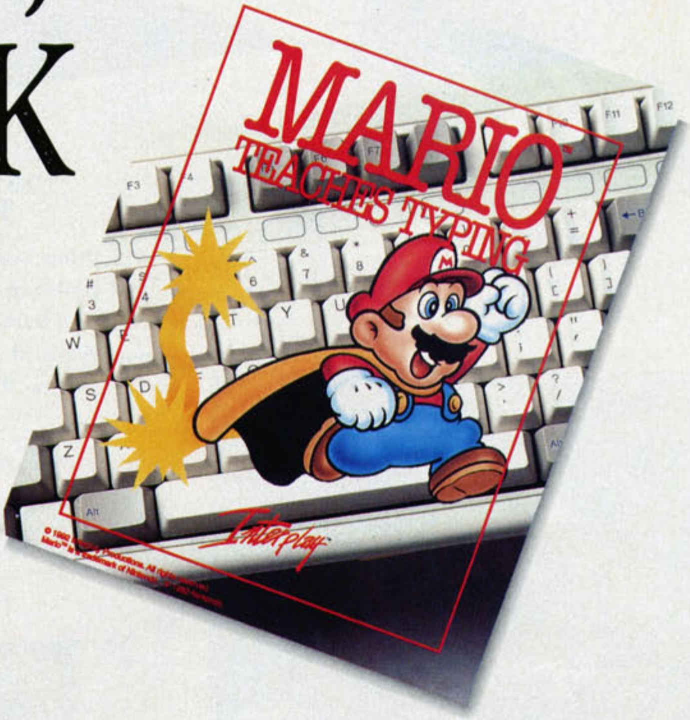
The lesson that software publishers seemed to learn from these efforts was that a product could not succeed in the market if it did not appeal to experienced gamers first. If its appeal could be transferred by experienced gamers, later, that was beneficial. There seemed to be no room for purely novice games, however.

Icon Play Clearly Now



By 1990, the success of the video game industry was significantly impacting computer game design with regard to interface. Since many designers and publishers wanted to see their computer games move onto the more lucrative video game platforms, icon-driven "point and click" interfaces began to proliferate. Broderbund's *Joan of Arc: Siege and The Sword*, Data East's *Full Metal Planet* and Interstel's *Dragon Force* provided icon-driven wargames, while Accolade's *Day of the Viper* and *Star Control* offered icon-driven action games. In the CRPG world, earlier products (such as Origin's *Times of Lore* and Interplay's Dragon Wars) were emulated in Data East's *Chamber of the Sci-Mutant Priestess* and *Drakkhen*, Infocom's *Circuit's Edge*, Interplay's *Lord of the Rings*, Mindcraft's *The Keys to Maramon*, andOrigin's *Bad Blood* and *Ultima VI*. Ironically, very few of these easy-to-be-imported designs ever made the transition to the cartridge game market.

RUN, JUMP, SWIM, KICK



NOW YOU'RE LEARNING HOW TO TYPE!

Mario's not just the world's king of adventure—he's your personal typing teacher!

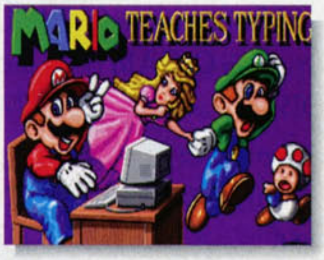
All the great Mario characters and scenes that you've come to know are here. Start by choosing your own identity—Mario, Luigi or The Princess. Then go at your own pace through each adventurous level:

Level 1— Hit the blocks, kick the turtles, and jump as high as you can while graphic hand visuals help you learn to find all of the letters on the keyboard without looking.

Level 2— Plunge underwater to escape the chasing fish while you learn to easily type full words.

Level 3— Head for the castle—but watch for falling blocks and treacherous quicksand—as you quickly become skilled at typing complete sentences and paragraphs.





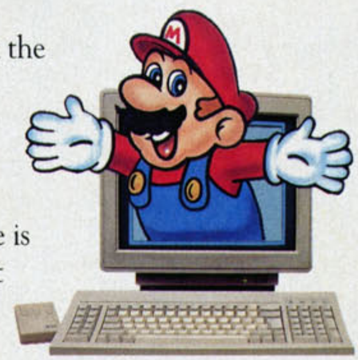


- *Convenient on-screen and picture-oriented icons*
- *Individually charts and records progress for entire family*
- *Follows progress from beginning through advanced levels*
- *Straight typing tutor option to eliminate game elements*
- *Full 256 color VGA graphics*
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MS-DOS Screens Pictured.

And when you reach the end, Mario says congratulations by printing out his special completion certificate—just for you!

Learning how to type is boring ...*not!* At least not with Mario and the gang.



To order *Mario Teaches Typing*™, call 1-800-969-4263, or see your local retailer. Available on MS-DOS and compatibles for $39.95. Coming soon on Macintosh.

Interplay Productions
3710 S. Susan, Suite 100
Santa Ana, CA 92704
(714) 549-2411



Number 88 Nov. 1991

THE WORLD OF COMPUTER GAMING 1991

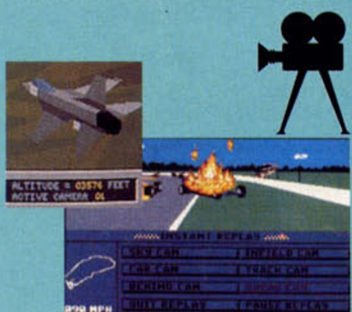
3900 GAMES LATER...

1991 CGW Poll
Top Five

1. **Wing Commander (Origin)**
2. **Railroad Tycoon (MicroProse)**
3. **Red Baron (Dynamix)**
4. **Warlords (SSG)**
5. **Ultima VI (Origin)**

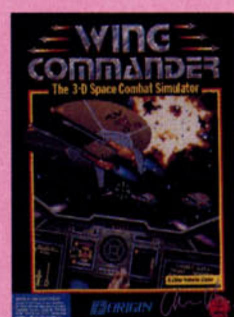
December 1991

EDITED FOR YOUR VIEWING PLEASURE



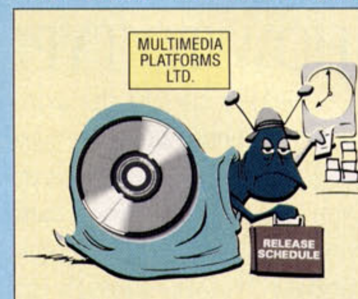
1990's *Red Baron* and *Stunt Driver* spawned numerous 1991 products with user-defined camera angles for instant replay. Unlike Spectrum HoloByte's 1990 *Stunt Driver*, however, where gamers had to set the cameras in advance of running the course, most of 1991's releases allowed the gamer to select the angles of view during the replay. *Falcon 3.0* let gamers view their mission from a multitude of perspectives, changing on the fly. Konami's *Bill Elliott's NASCAR Challenge* and EA's *Mario Andretti's Racing Challenge* (both developed by Distinctive Software) offered mutliple angles from which to review races. The former even lets gamers view crashes from any other car in the race. *Earl Weaver Baseball II* and *4-D Boxing* (both from EA) allowed replays from several angles. The latter even allowed players to edit their fighter's appearance.

HIGHEST RATING EVER!



In 1991 Origin's *Wing Commander* dominated the CGW Game Poll like no other game before or since. It debuted in the number one position in February 1991. In March it attained a 10.91 rating, the highest CGW Poll rating ever. It remained in the number one position until January 1992 when it was superceded by none other than it's own offspring, *Wing Commander II*. The two Wing Commanders remained first and second until the original was retired to the CGW Hall of Fame in April 1992.

The "Race" to Multimedia



In 1991, software publishers began to use more digitized images and film sequences in computer games. This was a combined result of delayed introductions of platforms with optical storage and the research/development being done in preparation for their introduction. Some games used incidental images, just to prove that it was possible. Other games, like Sierra's *Rise of the Dragon*, used film sequences to reveal clues.

The actual multimedia platforms themselves, however, continued to slip. Commodore's CDTV, expected by Christmas of 1990, was still touted as "Real soon now" in early 1991. CD-I, expected years earlier, was still gearing up for its release and Sega announced that its CD-ROM was still, at least, a year away. NEC hoped to ship its CD-ROM for the TurboGrafx 16 by the end of the year and the MPC specifications had not been adopted.

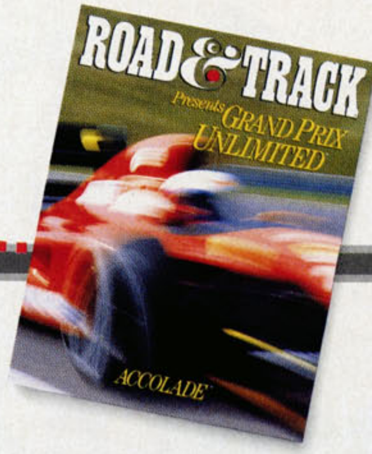
SCANNERS



Although Dynamix used the technique of scanning illustrations for 1990's *Rise of the Dragon*, 1991 became the "Year of the Scan." Sierra and Dynamix used the process of scanning painted backgrounds to both speed up development time and to offer a different look. LucasArts' *LeChuck's Revenge: Monkey Island II* used a similar technique (and the same hardware) to enhance the look of that popular game. Several companies scanned photos as backgrounds and segue screens, as well. Perhaps, the most interesting use of the scanning technology, however, was the use of colored backgrounds and animated sketches in *The Adventures of Willy Beamish*, an animated cartoon that offered a unique look for graphic adventures.







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Then test your design by racing one of the five authentic Formula One cars through pelting rain, swirling mist or blazing sun.

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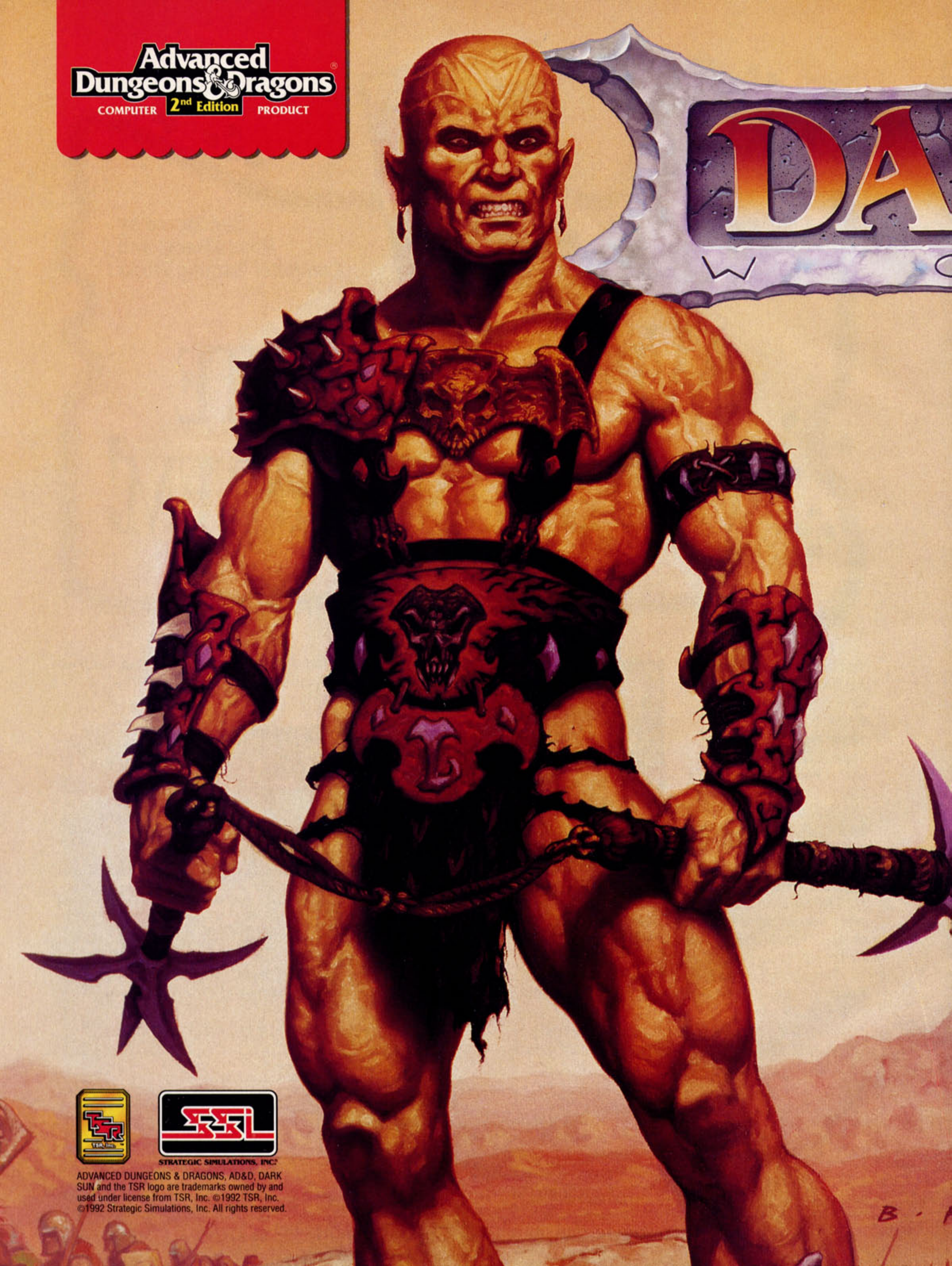
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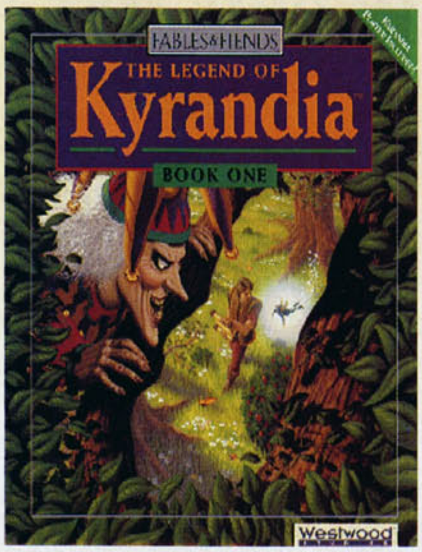
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Circle Reader Service #133

Westwood Studios' The Legend of Kyrandia



TITLE:	Fables & Fiends: The Legend of Kyrandia
SYSTEMS:	IBM, Amiga
PRICE:	$59.99
PROTECTION:	Documentation Look-up
DESIGNER:	Michael Legg
DISTRIBUTOR:	Virgin Games Irvine, CA

by Robin Matthews

The latest graphic adventure to hit the PC game shelves comes from one of the most prolific software development houses around—**Westwood Associates** (now **Westwood Studios**). To some that name may only ring a vague bell since it rarely appears on game packaging, although they have produced some of the most polished and stunning games released on 16 bit. Their previous titles include *Hillsfar*, *Dragonstrike*, *Battletech* and the superb *Eye of the Beholder I* and *II*.

Up until recently Westwood has merely used its undoubted talents to develop products for other larger publishers, but now it has become part of the **Virgin Games** empire and has released its first in-house product — Book One of their 'Fables and Fiends' series, *The Legend of Kyrandia*.

Part One: Setting The Scene

Kyrandia is a graphic adventure, very much in the classic mold, set in a magical kingdom 'found deep within the ancient forests' and steeped in magic and mystery. Many centuries before the story unfolds, the residents of Kyrandia and the inhabitants of the Natural World agreed upon a pact, both realms being united under a covenant of mutual care, understanding and protection. The 'land' gave the people of Kyrandia a wondrous gem called the Kyragem as a symbol of the pact, the gem's safety being the responsibility of the Kyrandian Royal Family. The Kyragem had many powers, the greatest of which was to unite the weak and diffuse powers of magic into a coherent and powerful medium, although this power was used sparingly, and only for the benefit of both realms.

Over the centuries the pact was maintained, through many events and testing times, but slowly the magical powers became familiar, and were occasionally abused. This lead to the founding of the Order of Royal Mystics, and eventually to the creation of the four 'mystical disciplines' of Alchemy, Spirituality, Scroll and Gem Lore.

In this way, the use of magic was more strictly regulated, but the neighbors of Kyrandia became more and more envious of its wealth and success. Although Kyrandia used almost every possible means, war followed, and at the brink of defeat it was necessary to use the magical powers to save the Kingdom.

Peace followed, and the Royal family and the pact prospered, until, in a moment of calculated ambition, the court jester, Malcolm, murdered the King and Queen and stole the fabulous Kyragem! The Kingdom was at the mercy of this maniacal courtier, when in the nick of the time the Chief of the Mystics, Kallak, was able to create a magical force field, imprisoning Malcolm in the Royal Palace and saving the Kingdom. Kallak took the sole heir to the throne, Brandon,

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into a far off rural area, there to raise and educate the boy in preparation for his ascent to the throne.

In the meanwhile, all was not well in Kyrandia, magical powers were not being replenished, and the Royal Mystics were forced to utilize some of the magic that was continuing to imprison the murderer Malcolm. As the spell became weaker, Malcolm prepared to escape and make good his terrible revenge on the Royal family, the Mystics (in particular Kallak) and the Natural World.



Part Two: The Game Unfolds

Kyrandia starts with a well-presented introduction showing the escaped and rather ticked-off Malcolm venting his revenge on a forest or two, a poor little squirrel and the mystic Kallak; a pretty nasty result for him, being turned into stone but still being able to see! This graphic sequence compares with the best, is not overlong and nicely sets the scene. An impressive feature is the use of perspective where the player looks at one scene, and the focus alters creating three scenes within one; first the player concentrates on the quill and the writer's hand, then behind that the writer's face itself, finally the window set at the back of the scene. This creates depth and atmosphere and gives *Kyrandia* a cracking start.



After the introduction one enters a gaming world which is best described as a cross between *Loom*, *King's Quest V* and *Secret of Monkey Island 2*. The graphics are genuine 256 color VGA/MCGA (the only standards supported) and are beautifully drawn. There are stated to be over 100 locations, these being 'self-contained' i.e. there is no real scrolling. One moves from one location to another in *KQ V* fashion.



The atmosphere and mysticism is similar to *Loom*, as is the ease of use. The interface is of the no-typing variety and doesn't even include icons. All actions are instigated with the cursor, using either the keyboard or mouse (highly recommended). The cursor is moved over an object/person and the action is activated by a single click. If it is an object this will be picked up, and can either be moved into or out of inventory, or manipulated. If you click on a person, conversation is automatic.

The interface does not contain default verbs such as in *Monkey Island 2*, so choices are limited, and the game is necessarily somewhat linear. *Legend of Kyrandia* is divided into four chapters, each chapter having a series of quests or problems, these becoming progressively more difficult in each chapter. The system is intelligent, with NPCs realizing if one has a required object or not, (and, in the latter case, prompting one to find it). Flags are set as the character completes tasks, triggering other events, and allowing him to progress in the game. Casual gamers will also appreciate the fact that the save game facility is simple, and allows multiple saves.

All the main soundboards are supported, with a classy full length sound track, incidental noises and sound effects. The music alters as the hero enters certain locations, again adding to general atmosphere. The locations themselves are well varied, with forests, cottages, caverns and (surprise, surprise!) an underground maze. This is a variation of *KQ V*'s desert, using 'fire-berries' as temporary light sources (and then being eaten by suspiciously 'grue-like' creatures if the light goes out) rather than dying from thirst. Luckily, this maze is nowhere near as tiresome as that in *KQ V*, but why do software authors feel they have to include a maze to make it a proper game?

Comparing *Kyrandia* with the above 'classic' graphic adventures, it has the magical nature of *Loom*, but with progressively more difficult puzzles and the use of gem stones as opposed to musical notes. The graphics are as good as *KQ V* and *Monkey Island 2*, possibly better than the latter as they are not so cluttered. The sense of humor is similar to the tongue-in-cheek approach of *Monkey Island 2*, and adds up to an enjoyable jaunt. The storyline is hardly original, and the interface/game system do not really break any new ground, but the presentation of the game, the general quality and the feel, make this a promising debut and a welcome addition to the world of graphic adventures. The game is also relatively short, so if you fancy a not-too strenuous stroll in a magical kingdom, you won't go far wrong visiting Kyrandia! CGW

Jack Nicklaus Signature Edition: The "Hole Shebang"

Examining The Course
First in a Series on Course Design

by Mark Alan Willett

Golf is the only sport whose playing fields are virtually infinite in variety and relatively undefined. Yes, I know the outfield fence varies in baseball, and there are rink-size variants in professional hockey, but for sheer distinction and impact on play, nothing approaches the fields of golf.

As a result, a critical aspect of the sport is "hole analysis" or, as it is often called, "course management." It is no mean compliment that today's computer golf games/sims are detailed and realistic enough to provide both the video display and requisite tools to make course management a possibility while playing the games. Though this article will look specifically at the tools available in *Jack Nicklaus Golf Signature Edition* (*JNSE*), the principles of course management may well be applied to almost any of the computer golf software packages on the market.



Illustration on VIEW HOLE function when scanning for hills and mounds in the design module.



Typical edit window in the Jack Nicklaus SE design module.

Analyzing a hole for its play values shouldn't just result in lower scores, it also offers the opportunity to develop a greater appreciation for the game and it is the best place for the mind of the golfer to see into the mind of the course designer. If one is standing on the tee at the first hole, for example, looking out over the fairway, which club should be used? Where should one try to hit the ball? Why? Where's the best place to start figuring this all out?

While the first temptation may be to take into account the wind and the condition of the course (whether it is being played on wet, normal, or dry surfaces), in fact, those are elements which simply modify play on the hole. They don't provide any insight into the hole itself.

So the first thing is to look at the hole, carefully and without consideration of the elements. *JNSE* is unique among computer golf games because it contains both a play module and a design module. Also, while some tools have been provided to assist analysis from the play module, the best evaluation of a hole can be conducted from within the design module itself.

In the design module, one can assess the lay of the land without interference from trees or other objects. One can also quickly view the hole from any point and look in any direction. Think of a tour through the design module as being comparable to "walking the course." For best play, the time you spend walking the course can be very rewarding to your final score.

Let's go to the EDIT WINDOW for the first hole and select OPTIONS. From that OPTIONS window, choose HIGH CONTRAST. By doing so, the distinctions between tees, fairway, rough, heavy rough/out-of-bounds, and greens will be clearer when you return to the EDIT WINDOW. Furthermore, changes in elevation are more clearly displayed.

The following are a few important things to look for while taking a tour of the hole:

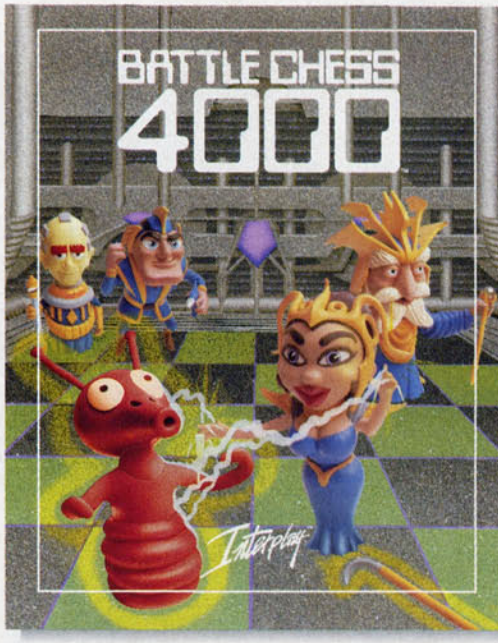
Most par fours and fives will begin based on a, roughly, standard 250-yard drive. Look for the landing area of the drive at about that distance from the tee. The TAPE MEASURE tool, available from most design module screens, is quite handy in measuring specific distances between any two selected points.

Is the landing area flat? Does one side slope? Are there bunkers, trees, or water which threaten it? If the standard landing area is greatly affected by any one of these features, a shorter or longer tee shot may be best. Further, remember that the course designer may be using the apparently easy first shot as a tease to make the next shot tougher.

On the Fairway

Course management is the art of seeing how the first shot affects the second and how that then affects the third, and so on. Courses are often designed with risk-reward factors where the difficulty of one shot sets up an easier next shot. So, it is a good idea to look back at that landing area and see if the easy tee-shot to flat fairway may

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MS-DOS Screens Pictured.

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actually make the second shot tougher or not. It is also useful to consider whether a more risky tee shot might lead to an easier approach.

The ability to narrowly skirt a dangerous stretch of water, a bunker complex, or an out-of-bounds area may actually lead to the shot which will result in a birdie or even eagle. This is a simple example of how risk-reward factors may be applied on the course. Often, the more risky shot either reduces the yardage of the next one or makes access to the green easier.

Avid computer golfers should make liberal use of the VIEW HOLE capability, available from virtually every design module menu, particularly to see if hills or mounds, trees or other objects, block the view of their shots. It is also vital to use this feature in order to make note of where the hole plays uphill, downhill and flat.

Of course, once the best potential first shot has been selected, the rest is easy. Using that as a starting point, one should use the same tools to evaluate the second and, on par fives, third shots. When done, the best path from tee to green should be abundantly clear.



VIEW OVERHEAD as provided in the Jack Nicklaus play module - also #5 at Alhambra.

On The Green

When evaluating an approach to the green, it is vital to make certain of two considerations: the length and width of the green *and* its elevations. Not only will the VIEW HOLE function assist one in this regard, but "zooming" in while in the BUILD HILLS menu will provide a cell-by-cell display of every minor and major change.

What should one look for on greens? First, it's usually easier to play to the length of the green. When selecting a landing area *before* making the approach, it is profitable to find the one that allows one to play lengthwise home. Second, it is useful to note if any adjacent bunkers are being used to simply "contain" the ball (and keep it in play), or if the green actually slopes toward the bunker. If so, it's important to draw or fade away from those bunkers when coming into the green.

Golf Course Appreciation 101

By this time, there should be some appreciation that each hole is a puzzle to be solved by the individual golfer. Let's go back to the tee and evaluate other variables. From the play module, it is possible to access an overhead view of the hole at any time. The AUTO CADDY feature is comparable to the TAPE MEASURE in the design module. The same with VIEW HOLE, though in the play module, all uses of the VIEW HOLE function point one toward the pin.

There are now three more variables: wind, course conditions and pin positions. The wind and course conditions are visible from the OPTIONS menu, COURSE CONDITIONS, and these have their greatest impact on club and shot selection: Will the course conditions cause a gain or a loss in yardage? Will they force the shot to

the right or left? Note how these conditions could change the best-laid-plans for getting to the cup.

Also, it is significant to note how the current pin position may change the approach by forcing the shot to come in over water, sand, or around trees. In the play module, one can access the GREEN OVERHEAD view to help one see the pin positions, elevations and area around the green. So, be prepared, using the previously selected best route as a starting point, to completely re-plan the entire line of attack. Naturally, this should be easier when one can use all that was learned about the hole in the process of designing the original.

Here are some other rules-of-thumb, but remember, there are always exceptions:

Play to the outside of doglegs. The inside is usually filled with water, sand, or trees. Even for those willing to flirt with the hazards, trees have this ugly tendency to block the next shot. Remember, the goal is to find the best angle to get to the green.



Illustrates use of the TAPE MEASURE function on the same hole used in the overhead picture.

Most course designers use flat terrain to help point the way. Look carefully, though, there may be a hazard lurking where one least expects it.

Try to pick a lie such that the next shot uses a full stroke. It is easier to hit a full 173-yard five-iron, for example, than to have to hit one short at 163 yards. When necessary, it is easier for most to hit a club longer than to hit a club shorter.

Remember that hitting into the "red-zone" exaggerates hooks and slices, but so does the wind. Learn to play into a wind with a draw or fade when control and precision are most important. Also, it is profitable to learn to play with the wind when its time to pick up extra yardage.

Learn to sort sand traps into three kinds: 1) Those that are used to help point the way to the best shot (in this fashion, they are simply signposts); 2) those that are used to punish bad shots (not as many as one would first think); and 3) those that really are helpful because they are used to keep the ball in play (called containment bunkers, they may be used near water hazards, out-of-bounds, and behind the green). Containment bunkers may act as a safety net and actually encourage golfers to take that more dangerous shot!

Happy Bird Hunting

The computer golfer who learns the lessons of course management is all the more likely to find himself/herself on the way to computer golf fame and fortune than those who choose to ignore the hints which the course itself provides. Next installment, we'll provide concrete tips on building one's own masterpiece. CGW

Weaving a Tale of Adventure

A Sneak Preview of SSI's *The Summoning*

by Chuck Miller

Sneak Previews are not designed to be reviews. They are feature articles based on "works in progress" that CGW's editors have deemed worthy of early coverage. These articles are not intended to provide the final word on a product, since we expect to publish appropriate review coverage when the game is completely finished.



"Inside, the Council awaited. They were 12, seated about a circular table, resting on a dais above the floor. In one corner of the room hung a great, crystal sphere. Rowena recognized it at once as the Orb of Knowing. Without ceremony, she took her measure of the Council, judging each of them who sat before her without waiting to be judged. Robes of regal blue, hoods lined in gold and threaded with silver filament, noble faces looking out; none of it fooled Rowena or gave her cause for awe. What she saw were defeated men. After all, not a single Lord among them would have accepted her as leader before this present war, this disastrous conflict of theirs with Shadow Weaver."

The Serving (of the Summons)

Little has done well since the appearance of Shadow Weaver. Kingdoms have toppled like dominoes under the powerful arm of his evil horde. In fact, events dictate the need to call forth a new champion in a final effort to defeat the malodorous presence responsible for this vast devastation.

Thus, a champion is summoned. With the aid of Rowena and the Council, this warrior is readied, then transported to Shadow Weaver's labyrinth to puzzle and battle his or her way to the Citadel and, in the end, to defeat the wicked denizen of the dark.

Under most circumstances, I would not look forward to receiving a summons. Appearing in court is just not my idea of a fun day. However, in the case of **SSI**'s soon-to-be-released single-character fantasy role-playing game, *The Summoning*, this adventurer is more than willing to interrupt his normal schedule to appear in the "court" described above and invest countless hours traversing the Shadow Weaver's immense labyrinth.

The Designing (of the Quest)

The Summoning hails from the lineage of *DarkSpire* and *Dusk of the Gods*, with its greatest similarity in design to the latter. However, don't let the more modest nature of these previous offerings color your expectations. **SSI**'s new fantasy role-playing adventure for MS-DOS gamers, developed by **Event Horizon**, significantly improves upon and refines those earlier efforts.

As indicated, *The Summoning* exhibits its closest heritage with *Dusk of the Gods*, reviewed in the September 1992 issue of *CGW*. Its chief two weaknesses, as presented in that review, "lack of emotion" and "uninspired graphics," have both been admirably addressed. Though not always providing an edge-of-the-seat experience emotionally, *The Summoning* does draw the player into the story and provides sufficient action and exploration to keep his or her gaze fixed to the monitor for hours on end. Graphics, presented in 256-color VGA Hi-Res mode, have received state-of-the-art attention and are quite attractive.

The Conjuring (of Combat and Conundrum)

The Summoning follows the basic slay-the-evil-wizard scenario where the player spends the majority of his or her time solving the puzzles necessary to reach the final encounter with evil incarnate, while at the same time developing abilities to a sufficient level to succeed in that predestined meeting. Though the story has been told endless times before, this need not detract from the playing experience; and in *The Summoning*, it indeed does not. Few role-playing games have so involved this adventurer in recent days. Not since *Dungeon Master* first appeared has a game of this genre so captivated my attention, enough so as to make it difficult to pause sufficiently to pen this preview.

Most time spent in the labyrinth will be devoted to either combat or puzzle-solving, with an anticipated 100 hours of



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Actual screen photos from the IBM VGA version.

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adventuring or more provided. The puzzles are, for the most part, object-oriented — finding the right key for the right lock and manipulating trigger plates to open and close pits in the correct order. Keys are quite basic, as they are normally used in close proximity to where they are acquired. The trigger plate variety of puzzles, though, is a little more perplexing.

Fortunately, combat is not stressed to the same degree as that of other **SSI** offerings, particularly Gold Box games (let ecstatic shouts of joy ring forth!). The combat present is both challenging and manageable, though some of the more difficult battles do require the retreat-save-and-heal-thyself approach. However, the emphasis is definitely focused more on character development and exploration than on combat.



Several sub-quests are provided within the confines of the overall adventure. While not all need to be completed to defeat the Shadow Weaver, they do provide items to make the job easier (especially weapons — consumables which wear out and break). Some of these sub-quests, nevertheless, must be completed as they provide items essential to a successful conclusion.

Character interaction is also important to success in the labyrinth. Many NPCs hold information and items of extreme importance. Thus, questioning each of them is vital. While it is recommended that players keep track of the information given, it is no longer necessary to take written notes. Conversations with NPCs can be conveniently printed out if so desired.

The Positioning (of Characters and Scenery)

The Summoning is presented from a 3D isometric perspective, allowing the player to control the activities of his on-screen counterpart from a godlike vantage point. As the character moves about the labyrinth, the screen scrolls to reveal his immediate surroundings *and* immediate opponents. Rooms and passages concealed behind closed doors and gates remain unseen until the obstructing object is opened.

Partial-screen cinematic sequences, interspersed throughout the game, lend a feel of motion and realism. For example, when using a ladder to climb from one level to another, a small window opens on the screen and depicts the player's hands ascending or descending the ladder one rung at a time.

The Magic Screen, when activated, covers the top two-thirds of the gaming window and effectively pauses the game. Spells, which play an important role in *The Summoning*, are created by combining hand symbols in the correct sequences. Covering the lower third of the playing field is the Character Screen which can be raised or lowered as much as needed, providing access to the player's inventory. Also available from this screen is an auto-mapping feature, similar to that in *Ultima Underworld*. However, *The Summoning* goes one step further by allowing one to print the maps — a long overdue and appreciated feature.

The Foreshadowing (of Needed Improvements)

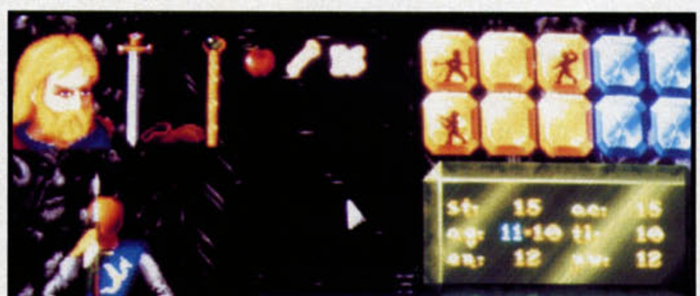
There are, of course, some areas which need improvement. Copy protection remains an obtrusive match-the-symbols-on-page-such-and-such event that precedes play. Most designers still need to incorporate more unobtrusive protection schemes into their products.

Music and sound effects are ably handled. However, while sound effects accompany game play throughout, music is reserved for special occasions only and is noticeably absent from most of the gaming experience. Not all players crave the constant drone of "dungeon music," yet its presence would be welcomed, along with the option to turn it off if so desired.

The only other "chink" worth mentioning is the lack of a quick-save function. At present, the player must go through several requesters in order to save his position. Adding the ability to "quick-save" the current game would be especially handy.

The Prognosticating (Regarding the Published Version)

Still in its final beta stage at the time of this writing, *The Summoning* has proved to be a substantial and stable product, though certainly in need of several finishing touches. Even so, it is a polished and much improved offering from **Event Horizon**, one that will make a fine new addition to **SSI**'s stable of thoroughbred developers.



The Summoning effectively combines elements of traditional RPGs and animated adventures into a very playable and enjoyable package, creating one of the best single-character dungeon adventures to appear in a very long time, and providing a refreshing and consuming experience. Seldom have I been as caught up in a new adventure as I have been with this one. Hopefully, many other gamers will find themselves presented with the same summons as this thankful adventurer. **CGW**

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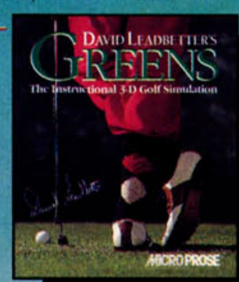
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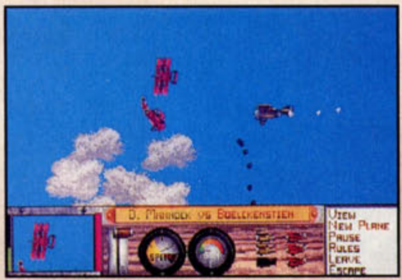
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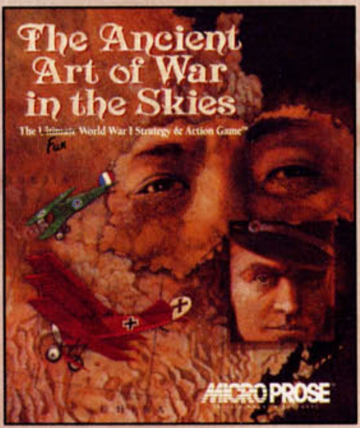




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Circle Reader Service #158

Designer Profiles: Peter Oliphant

From Pictures to Pixels: Old Hollywood to New Hollywood

It is, perhaps, appropriate that Peter Oliphant's last released title, *LexiCross*, has recently been converted to the Macintosh. On the old *Daniel Boone* television series, Peter played the part of a young Scottish boy from the Macintosh clan. Currently, Oliphant is working on a top-secret project for **Interplay** Productions that is expected to be their primary product announcement at the Winter Consumer Electronics Show (January, 1993).

CGW has always been interested in the journey from the old Hollywood of film and television to the New Hollywood, and Peter's story is an interesting way to explore the differences and similarities between the two entertainment industries. Industry insiders are always accusing the entertainment software industry of being an "incestuous" industry where: everyone knows everyone else; "who" one knows is often more important than "what" one knows; and players from one company almost inevitably show up at another company in the same industry.



Peter Oliphant in "Mr. Hobbs Takes a Vacation, with James Stewart

Life in the "Old" Hollywood

The old Hollywood must have been similar. Peter Oliphant got into show business because his stepfather, Darrold Westbrook, was an actor and occasionally worked in atmosphere (i.e. as an extra). He came from an entire family that was interested in show business and, eventually, the family formed a local "live" program called *Air Patrol* (aired on Channel 5 — KTLA, a station under Gene Autry's Golden West Broadcasting rubric). Peter's uncle was a clown, his stepfather played a regular role and, one day, as a guest, Peter took over the entire show by talking and doing ad lib business. Peter's precociousness (he was apparently able to both read and write long before being of kindergarten age) and cute sense of humor was so delightful that the family kept him on as a regular and, in Oliphant's words "Once you've got a credit, it's much easier to get an open door for the next job."



Peter Oliphant, Designer of Lexicross

So, for a while, Peter entered the daisy-chained world of series pilots and guest appearances. His pilot, *Be It Ever So Humble,* showed Peter on-screen as an adult trapped in a child's body, but used a dubbed voice-over of an adult male to dramatize the difference between a kid's perspective and an adult's perspective. The pilot didn't sell (apparently being too far ahead of the rash of summer films using the same schtick a few years ago), but it gave him a chance to make an appearance on *The Donna Reed Show*. In the episode entitled, "Mary's Little Lambs," he played a little kid who tore up the dolls and the puppets behind the stage. In addition to *The Donna Reed Show*, he also turned up as a "poster child" on *Doctor Kildare* where Richard Chamberlain looked at his foot.

One of his most exciting credits was in the film *Mr. Hobbs Takes A Vacation* with Jimmy Stewart. The shooting schedule for the film went past Christmas and, on the last shooting day prior to Christmas, Stewart handed out gifts to the cast and crew. As he finished handing out his presents, Stewart suddenly caught a glance of Peter sitting patiently on the floor of the sound stage. He realized he had forgotten the "kid," so he went back into his dressing room and brought out a generic gift. Humorously, the gift turned out to be a bottle of Scotch. Peter wishes he still had the bottle, but figures his parents were pleased with Stewart's "thoughtfulness."

Peter also appeared in five episodes of *The Dick Van Dyke Show*. Interestingly enough, only four of the five were aired during the series' Emmy-winning run. The episode which didn't air was written and directed from the perspective of two goldfish in a bowl as they observed the goings-on in the Petrie household. After the episode was filmed, the producers decided that they would lose audience share if they broadcast it. They considered the episode too weird and experimental for the public's taste. Whether in the old Hollywood or the new, it appears that weird and experimental, as well as innovative and unique, are concepts that are often avoided.

Such were the environs of this game designer's life until he reached the eighth grade. Then, except for a one-

shot appearance, he didn't work in Hollywood again through high school and college.

Birth of a Computer Game Designer



"Mr. Hobbs Takes a Vacation": Take 2

As a sophomore in high school, he started computing when he was taking upper division math courses. Through the math department, he started using computer mainframes and entering programs via punchcards. Though he actually attended Los Angeles' Fairfax High School, he was allowed to take computer courses after school at Hamilton High (where they had an IBM 1130). As a junior, he wrote a Roulette program and, when his own school got a terminal, became the computer monitor for his high school.

When Don Daglow, President of **Beyond Software** (and producer of both the original *Earl Weaver Baseball* for **Electronic Arts** and *Tony LaRussa Ultimate Baseball* for **SSI**) and, later, Eddie Dombrower (designer/programmer of *Earl Weaver Baseball* and *Earl Weaver Baseball II*) were going to Pomona College (one of the Claremont Colleges), Oliphant was going to Harvey Mudd (another of the Claremont Colleges). All three computer science students were later to end up working on **Mattel**'s *Intellivision* team and all are still involved in the computer game industry, today.

During that time, Peter wrote a contract bridge program on the mainframe to determine the percentages of winning hands and also studied game theory. After college, he went to graduate school at Purdue for one year (where he did not study computers, but did some tutoring in computer science). He decided that graduate school in mathematics was not for him and moved back into the Claremont community (silver umbilical cord syndrome). Seeking work, he went back to the college guidance counselor and told the counselor that he'd like to program games for a living. The year was 1976. The world was not ready for computer game programmers and the counselor told him to come back when he was serious.

Finally, Oliphant landed a job at **Sperry-Univac** in 1977. There, he learned to program in assembly language and wrote software that was used on military computers. One program was used with coast guard rescue missions and adapted for Anti-Submarine Warfare (ASW).

Later, Peter got a job with a defense contractor that was a spin-off from TRW. There, he was supposed to maintain software written in bit splices (next level below assembly programming). Unfortunately, the original code was not commented and maintaining another person's uncommented code proved to be a horrendous experience. He was all set to bail out of the company with the "program from hell" and had managed to use his high security clearance to get a job interview with the CIA.

Just at that time, however, his original dream came true. He ended up at **Mattel**, working on *Intellivision.* When the division split off a hand-held games department, they had plans to release a game based on the coin-op hit, Gravity, as well as a juggling game. They wanted to develop prototypes for six more games from which to choose an additional title to add to the two they had already selected. Developing the prototypes was Oliphant's first experience with 6502 programming and they chose one of his prototypes called *Docking. Docking* was one of the first games to use geometrical wire-frame graphics and required gamers to successfully maneuver their space ship into a space station's docking bay. He also worked on *World Championship Football*, *Speed Freak* and *Stand-Alone Football*, while at **Mattel**.

Mattel decided to go into personal computer software and Peter became the head of one of seven development teams. The division went from twenty people to 140. The section was supposed to be experimental and Peter, enamored with the possibilities of **Atari**'s new machine, started working on an **Atari** game. Unfortunately, **Mattel** didn't want to sell software for any hardware that they weren't selling themselves. Peter stopped working on the game at work, but ended up working on the program at night and decided to sell it independently, Eventually, he sold *Wall War* to **Sierra** for a $16,000 advance. Then, when he decided to go independent and was getting ready to leave, Mattel changed their minds and decided to release *Wall War* as *Force Field* (its title when Peter did the original design in-house). By the end of his going away party, Peter was informed of impending litigation concerning the title. One year later, **Mattel**'s computer division crashed.

Life in the New Hollywood

By that time, however, Peter was living in Oakhurst, California and working for **Sierra**. Early on, Peter worked on both conversions and his own projects. He programmed the conversions of *Troll's Tale* and *Dragon's Keep*, as well as his first legitimate hit, *Mr. Cool. Mr. Cool* was only a small hit by either today's standards or those of the era. It was a little game, heavily influenced by the reigning coin-op hit, *Q-bert*, but it was an excellent performer for both Oliphant and **Sierra**, nonetheless.

Encouraged by his, admittedly minor, success, Peter signed a contract to co-design *Mickey's Space Adventure*. Before he knew it, however, he had a 400 page design document placed on



Peter Oliphant with Richard Boone (Paladin)

his desk and, by his recollection, approximately 25 pages with minor or major changes from Roberta every day. He worked 20 hours per day (from 1 PM until 8AM or so), seven days per week for seven weeks straight in order to get both the Amiga and Apple versions of the game completed. Unfortunately for Oliphant, the contract contained royalty ceilings (i.e. if the game did too well, they wouldn't pay anymore). Since *Mickey's Space Adventure* was a very successful product and Peter felt cheated, he left in a contract dispute that was, eventually, to cause him personal disaster.

Right after he left **Sierra**, Peter worked for **Davidson Associates** on their *Homeworker* package (Peter did

the calculator section of the program). Then, he moved on to **Paramus** where they were building LANs with Apple IIs. **Paramus** planned to port their software over to the IBM, but abandoned their project when the industry as a whole tightened its purse strings in 1985. As the highest paid person on the programming team, Peter was the first to go when things started going bad. He also felt discriminated against because he was the only employee who was not part of the religious clique at the company.

His next job, however, was to bridge the gap between his earlier career and his current one. Peter says that one of the main reasons he got the job at **Cinemaware** was because of his show business background. His first responsibility was to work as a producer on a conversion of their *Sinbad* product from the Amiga to the ST. **Cinemaware** was using a Hungarian programming team to do the work and Oliphant was frustrated with the way they worked and having to direct all the work through long-time software agent, Stephen Friedman. Peter decided to cut out the middle man and become a programmer on the IBM conversion of *Rocket Ranger*, instead. It was the first code that worked automatically whether one had CGA, TGA or EGA without having to have separate versions.

As Cinemaware itself began to falter, largely because it was banking on the world of CD-I and CD-ROM to put them in the forefront of entertainment software companies, Andy Caldwell (**Sport-Time**'s *SuperStar Ice Hockey* for **Mindscape**), Steve Quinn, Peter Oliphant and John Reego formed a company initially called **Atomic**, later



Peter in an early role.

AfterShock Software. Peter was the first to leave **AfterShock** after a dispute with John over Peter's projects. John never wanted to do any of Peter's designs and Peter kept getting stuck with contract work on other people's designs, including an **Activision** project called *Sabet*. **Activision**'s style during this era was to start 25 projects and throw 14 of them away. Unfortunately, Peter's project ended up in the latter category and that was the last straw for his relationship with **AfterShock**.



Closing Credits, Dick Van Dyke Show

Now, nobody would hire Peter for *anything*. He played tennis with Rob Landeros of **Virgin** and Rob suggested that they work together on an X-Rated version of *Wheel of Fortune*. Peter, probably very much aware of contracts and licensing from his days in the old Hollywood, told Rob that it was impossible to sell a *Wheel of Fortune* game, even an X-rated version without getting sued by the production company. However, he suggested that if it were turned into a crossword puzzle game, it would be fair game. **Activision** turned down *LexiCross*, but **Miles Computing** purchased it before it went out of business.

After **Miles**' demise, **Accolade** and **Virgin Games** both turned the game down because game shows need a "license" in order to sell. Peter finally went to **Interplay Productions** and showed the game to Brian Fargo. Brian was not immediately optimistic for the same reason many other publishers had been skeptical. After playing the game for a day, Brian called Peter on Sunday morning, said that he and his wife couldn't stop playing the game and the final deal for *LexiCross* was solidified.

Peter is currently working on the project known only as *Brian's Dungeon* (Not the final name). What little we have seen of the game leads us to believe that neither Peter's experiences in the old Hollywood nor those in the new have been wasted on this showcase product for 1993. CGW









I'm a Sinner I'm a Grinner I'm a Slam Dancer and a Tale Spinner

by Jerk Malfeasance

Milwaukee is a disgustingly clean town. You can't hardly find a biker or a gang banger anywhere. At least, that's what I figured when I left the Mecca and stepped onto the street. Then, this preacher guy in a beat-up panel truck, with blood-red slogans painted onto every dirty white smear of surface, starts circling the block with his speaker blaring out the glorious news that we were whoremongers and sinners. This gave me some hope. I figured it meant that some of my kind of people were around. He started shouting something about the world burning in flames, though, and my mind started wandering.

I had just been told that the brilliant World War II strategy game from **Australian Design Group**, *World In Flames*, was being converted into a computer game with modem and network capability for up to four players. Players will choose the U.S., German, Japanese or U.K. side and the difficulty level for the game will be set by letting the player(s) determine the level of control they wish to have over their units. Assuming the deal works out, a new software publisher called **WhiteWeb Software** will be publishing the game as part of an extensive roll-out of new products within the next year.

I didn't even feel like running out and overturning the old preacher's truck anymore. Just thinking about all the new software under development pumped me up so that I wanted to go slam dancing. Wonder if they had some abandoned old warehouse around here where it was happening? I started off in the direction of the Safe House. The burgers weren't much, but the spy motif with its false doors and secret passages usually elicited a few secrets from software folks. Everybody wants to be a spy.

My contact recognized me immediately. Guess it was the sunglasses. He told me that he and Marc Miller, creator of *Traveller*, had just seen a demo of **Kesmai**'s *Multi-Player Traveller*. Running under *Windows*, the upcoming **GEnie** game will have the complete data on the entire Imperium from the **GDW** sourcebooks. The way cool part is that players will be able to download the data onto their hard-disks only as their characters (each **GEnie** account will be able to support up to four player characters) either personally explore new planets or as they purchase the information from other player characters.

I asked him if he'd ever heard of *Operation: Phoenix*, another **WhiteWeb** game. When he hadn't, I told him it was due to be a CD-ROM space conquest game where players would get recorded radio-style messages to update them on planetary situations and digitized film footage of planetary battles. It even has an AI routine that "learns" as it plays against human players and a capacity for modem and network play for up to four opponents. I thought my contact might enjoy the planetary exploration and having to put down guerrilla uprisings on conquered planets.

I grabbed my souvenir glass and jammed it into the pocket of my leather jacket. Slapping my contact across the shoulder, I told him I was off to find whatever Milwaukee's idea of a happening place might be. "Oh," he snickered, "you must mean the cyber-tribal-disco place, Club Marilyn." I asked my contact how he knew about the place and he said it was where some of the **SSI** gang were going to be hanging out.

Well, I didn't know if the club was going be any good, but I knew the potential for rumors was going to be. Maybe I could get Kathleen Watson to go on record and tell me if **SSI** was really going to publish an updated version of *Archon*. That is, if she could hear me over the funky out-of-synch backbeat arrangements of upbeat tunes they were playing in this dump. They were raining vegetable oil smoke from the ceiling and zapping strobe lights through it so that the whole place looked like some grotto where mysterious tribal rituals might be performed. The voodoo woofers made the dance floor vibrate like a 2.6 quake and the dancers looked like the new animated monsters that are supposed to be coming to life in next year's *Archon 2000*.

During a pause in the cyber-tribal-disco writhing that passed for dancing, she leaned close to me and whispered those magical words that always turn me from punk to gentleman, "There's something I need to tell you." I jerked the length of chain that clasps my reporter's notebook to my steel-studded belt and got ready to write. She asked me if I had seen *SkyRealms of Jorune* in the dealer room.

"Sure," I replied, "It's not a computer game, but I knocked one off the table and bought it as damaged goods, anyway."

"Well," she smiled, "what would you say if I told you it was going to be a computer game *next* year?" I told her that I knew of several companies who couldn't possibly be publishing it if it was going to ship next year and grinned cruelly so that she could take in my artificially sharpened canines. Instead of appreciating my slam on the competition or reacting to the desirability of my dangerous dude vamp, she had the audacity to ask me if there were any new wargame companies on the horizon.

I told her that this new **WhiteWeb Software** group looked like they were going to hit the simulation market pretty heavily with their line of simulations. One is going to be a tank sim called *Rolling Thunder*. Besides being multiplayer via modem or network, it will feature animated sequences to keep the player informed of the war's progress.

Then, the music started up again and, since we couldn't hear each other anyway, I began to move in the stiff cyborg shuffle I call dancing. You can always tell a PR professional, though. She didn't laugh. CGW


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Circle Reader Service #139

Brainstorming Bolsheviks



Spectrum HoloByte's

CRISIS IN THE KREMLIN

by Chuck Moss

"Half measures can kill when on
the brink of precipices,
chafing in terror at the bit,
We strain and sweat and foam
because we cannot,
jump just halfway across."

Yevegny Yevetushenko — "Half Measures."

In **Spectrum HoloByte**'s political simulation *Crisis in the Kremlin*, the player gets the opportunity to assume leadership of the Evil Empire at its most critical juncture: 1985. Chernenko is dead, the USSR is rotting, Stalin's system is cracking. We know what Gorbachev did, and to his eternal credit, he killed the Bolshevik state — even if inadvertently. The death of Soviet power is a dream come true for a weary world, but today's outcome — an economically prostrate, fissioned Eurasia — is not the best of all possible worlds. A unitary, free, reformed, free-trade federation within the USSR's vast boundaries would be a marked improvement. The question is, will players win where Gorby lost or will they find themselves overthrown one night like poor Nikita Khruschev?

Crisis in the Kremlin lets everyone have a go at reworking history. A graphically gorgeous game, the mechanics of *Crisis* were accurately noted in Johnny Wilson's Sneak Preview (CGW #95). Without retreading that ground, here's a short briefing. The player begins as either a hard-liner, a Gorbachev "moderate," or a Boris Yeltsin-style reformer, with appropriate policies in place. He faces a command screen with a map and menus, and occasionally — a cup of tea.

One runs the USSR by manipulating two variables: policies and budget. Policies

TITLE:	Crisis in the Kremlin
SYSTEM:	IBM
PRICE:	$69.95
PROTECTION:	None
DESIGNER:	Larry Barbu
PUBLISHER:	Spectrum HoloByte Alameda, CA

cover matters such as civil rights, economic freedom, military aggressiveness and media freedom, all measured on a scale from one to 10 (where one is equivalent to Stalin and 10 his 180 degree opposite). The game runs in "real time," by months, with certain known events occuring at the proper times (Chernobyl, for example, blows in April of 1986).

The budget power is the meat of the game. Although budgets officially take effect in October of the year, one can tinker throughout the game — and should. Budgets can be handled at various levels of involvement, but the player should always use the "detail" option. This power is one's major lever for change. Reallocation of resources is the key to reform, along with the decisions made at certain historic junctures (e.g. should one adopt Glasnost or send its adherents to Siberia, etc.).

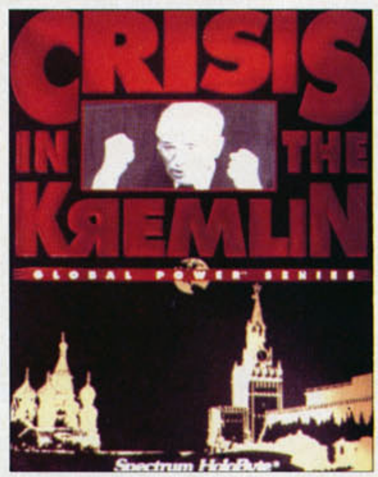
Of course, one is not total master of the top. Political strength ebbs and flows, and the hardliners always seem to have enough power to stymie reform. Too many steps taken at once and the screen will fill with video footage of coup tanks rumbling through Moscow. So long, comrade. Sometimes, the player can face down the opposing faction, but changes need to be done incrementally. That's why monthly salami-slices of budget and policy moves need to be spaced out throughout the year. With luck and skill, players could survive to the end of 1991. The Soviet Union might, too!

Crisis of Verisimilitude

Crisis is an admirable effort, well-produced and lavishly underpinned. Ultimately, however, it must be judged on two levels. One is its quality as a game, the other its accuracy as a simulation of the Soviet situation in the late 1980s. Let's deal with the second item first.

Computer political simulations are a fairly rare breed and most of them have tended to reflect extreme bias on the part of their designers. The most successful political games are Chris Crawford's pacifist treatise *Balance of Power* and the wildly leftist *Hidden Agenda*. In the former, nuclear war erupted if the U.S. so much as sent five million dollars to Panama; in the latter, the game program forced the player to become a Sandinista to survive.

Crisis has a similar bias — one that drives the player toward establishing a free market, and both political and social liberation. This reviewer is an unreconstructed Reaganite and heartily approves of all these moves. However, the USSR did not have to implement these reforms. As Deng's China and Castro's Cuba have shown, authoritarian reaction is a valid option. Unfortunately, the game's designers do not allow us to — as Editor Wilson put it succinctly, "hit the snooze bar of history." This distorts the game's veracity from the outset.



Secondly, the central game mechanism is authoritarian. A player micromanages the economy to a total degree — which was the USSR's problem in the first place! There is no way the player can "de-control" segments of the economy, or de-bureaucratize. This further distorts the actual process. Thirdly, events occur often without regard to performance in the economic model. Despite this reviewer's consistent funding of agriculture at the maximum level and distribution of land to the people, "food riots" occurred; mainly, it seemed, because food riots always occurred at that particular chronological point.

Finally, there is no political interaction. This is perhaps an unfair criticism, as this reviewer strives to critique the game released, not the game the reviewer wishes

were released. However, Gorbachev needed to rely on people to carry out his reforms, and the failure of those underlings (and in the case of the coup plotters, their



actual betrayal) was a sizable element in the drama. *Hidden Agenda* makes effective use of subordinates. As the USSR, like most tyrannies, was actually a feudal welter of interests beneath the facade, *Crisis*' inability to more than crudely simulate this central aspect of the situation hurts the model.

As a re-creation of the late Soviet Union, *Crisis* has a surface plausibility. All the proper elements are present; the dates correspond with actual events, the special events (Chernobyl, Matthais Rust, Perestroika) generally occur at the proper times. However, Gorby's progress went through several stages. First came "uskoreneii" or acceleration in 1985-1986, which was actually marked by more centralization, as well as the catastrophic anti-alcohol campaign. Acceleration's failure led to expansion of "glasnost" which began a device to purge corrupt Brezhnevites. Discarding uskoreneii for a mid-course correction led, in 1987, to restructuring, or "perestroika." Finally, the mishmash of "half-measures" led to the 1989-91 period of spiraling collapse.

Throughout this time, Gorby backed and filled, hemmed and hawed, pushed forward and retreated, put forward plans and retracted them. He compromised all over the place, thus dissipating his own influence and throwing the nation into chaos. *Crisis*, by contrast, presents the reform period as a linear progress; slowed perhaps, but steady, rather than the chaotic mishmash it was.

An acid test of a simulation is whether, by doing what the historic principals did, one can obtain the same general result. This reviewer has been unable to survive past 1988 following the Gorby line. In every one of more than fifteen games, Mikhail Sergeevich's strategy has led to premature hard-line overthrow. Thus, as a simulation, *Crisis* falls short.

Better Than An Anti-Alcohol Campaign!

Now to the game aspect: it's fun. It's challenging. One can try a variety of different strategies. I've played it for two months and I'm not sick of it. Although technically without degrees of difficulty, the "Yeltsin" scenario is markedly easier, as the necessary policy changes have already been made — all the heavy lifting done. If played prudently, "Yeltsin" can have the budget balanced and the people fed in two years, as well as keep most of the union together (minus the East Bloc and the Baltics) by the game's cut off date: New Years' 1992.

Gorby's scenario is tough, but this reviewer found the most challenging job was to rule as a hard-line "Brezhnev," following the Deng Zhao Peng formula of economic liberalization and political control. To sum up, *Crisis in the Kremlin* is a quality product that marries a challenging economic/political game to the drama of the late Soviet Union. Despite an annoying tendency to hang up on my Samsung laptop, the production values are superb, the graphics are stunning and the accompanying background material interesting. This worthy stab at a limited genre is to be commended. CGW





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The Horror, The Horror

Capstone's *The Dark Half*

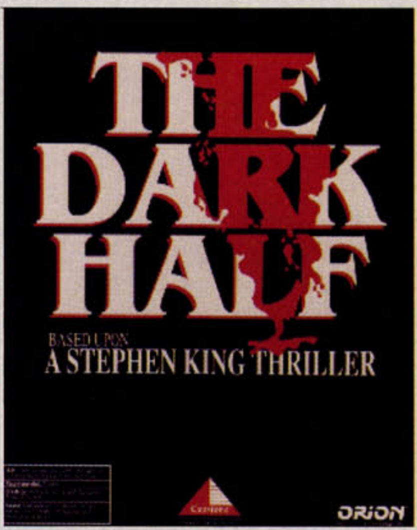
TITLE:	The Dark Half
SYSTEM:	IBM
PRICE:	$59.95
GRAPHICS:	VGA, EGA, Tandy 16
SOUND:	All Major Sound Cards
PROTECTION:	None
DESIGNER:	Kelcey Simpson
PUBLISHER:	Capstone Miami, FL

by Charles Ardai

The Dark Half is one of Stephen King's most violent novels and one of his best. It is also, along with *Misery*, one of his most personal, telling the story of a successful genre writer who is haunted by a pseudonym come to life — a story that carries King's own experiences with his sometime-pseudonym Richard Bachman (under which name he wrote *Thinner*, *The Running Man*, and two other novels) over the line into horror.

Respectable Thad Beaumont, who lives in Maine and makes money hand over fist from a series of ultra-violent novels written under the pseudonym "George Stark" goes public when a nosy fan threatens to reveal that he and shockmeister Stark are one and the same. Beaumont reveals his secret identity and ceremonially "buries" Stark, only to find, within days, that the phony grave has been dug up and that his own fingerprints are all over a string of sadistic murders carried out by his psychotic doppelganger. Stark is the "dark half" of the book's title, representing the dark side of the writer, Beaumont, incarnated as an inhuman killing machine.

As should be evident, this novel is not made of the stuff that goes into good computer games — it contains no "delightful" horror, only dark, soul-searing, grief-inflected horror. (By contrast, such King novels as *Needful Things*, *Christine*, or *It* would be perfectly suitable for computer game development.) Turning *The Dark Half* into a computer game shows a degree of sensitivity and savvy unseen since **Data East** decided that *Platoon* would be a good license under which to release one of its jungle shoot-em-ups. Granted, much of the reason the *Dark Half* game was created was as a tie-in to the soon-to-be-released *Dark Half* movie, meaning that some of the game's flaws may owe their genesis to the designers' faithful adaptation of a rotten screenplay rather than to their butchering of a good novel. Whatever their source, the game is full of flaws at every level, from coding to plotting to artistry.



Dark Roots

The game, though released by **Capstone**, was developed by **Symtus**, whose only previous credit was the negligible but entertaining action game, *Cybergenic Ranger*. Designing one **Sega** *Genesis*-style twitch game was clearly inadequate preparation for the much more challenging task of crafting a sophisticated **LucasArts**-style graphic adventure. It is a bad sign when a game touts "innovative" game features that other publishers have been featuring for ages. "Unique interface with point-and-click ease," the box proclaims, for instance, referring to an interface which is graphically unique (commands appear as keys on a typewriter keyboard, text appears on a sheet of paper coming out of the typewriter) but which in all substantial ways is no different from the interface of the classic **Lucasfilm** gem, *Maniac Mansion*. "Graphic inventory display of over 35 items," the box exults, "Spine-tingling VGA images."

For the record, there is no image in the game that will leave anyone's spine tingling, unless the sight of body-shaped pixel masses on top of jagged red "pools" has that effect on the most sensitive of players. (One of the problems with computer games in the horror genre has always been that it is hard to drum up much sympathy for characters who are visually only one step up the evolutionary ladder from the Mario brothers.) In the game's occasional close-ups, the drawings are crude and the color-selection is poor. Most of the game's scenes are done in medium and long shots and while the game does deliver on its promise of "cinematic animations" with fluid scrolling and some nice effects, the look of the game will not knock anyone's shoes off, much less their socks.

The typewriter interface is a clever conceit, but its appeal fades quickly when one realizes that one has to wait for a blank sheet of "paper" to scroll up every time one wants to enter a command. Equally annoying is the need to wait until a command has been completely executed not only before entering the next command, but before even being allowed to move the cursor to where one wants it in order to select the next command.

Worst of all, there are no shortcuts built into the command structure. One cannot type 'L' instead of clicking on the "Look" key, and there is no way to repeat a command without going back to the typewriter keyboard. This means that when one wants to perform an action repeatedly (such as looking at all the headstones in the cemetery or taking all the implements in the tool shed) it is a matter of dragging the cursor back and forth, over and over again, from the command key at the base of the screen to the objects with which one wants to interact. Mouse users will merely be annoyed; joystick and keyboard users might as well not bother.

Needless to say, there is no such thing as a "Take All" command. This is particularly frustrating because the game is crammed full of items which look interesting but which turn out to be useless. (As irritating as it is to have to go back and forth to collect a screenful of supplies, it is even worse to go back and forth only to be told "I don't need that" nine times out of ten.) Also, many of the items on any given screen are visible but do not register when one passes the cursor over them — and even this is inconsistent. The bowl in Thad's living room is there when one "Look"s at it but not when one tries to "Pick [It] Up."

The game is full of things it doesn't need to pick up and things it doesn't want to do. Try to open the barbershop drawers and the game says, "I don't think the barber would like that." Try to open Thad's window at home and the game says, "Better not, looks like rain." (The day is perfectly sunny.) Go to the payphone even after Thad has found some change and the computer says, "I don't have anyone to call." (This despite the fact that, if one uses the phone at Thad's home, Thad immediately calls a fellow professor.) From beginning to end, the game will only let players do what it wants them to do.



Betrayals and Bugs

The paper-thin veneer of interactivity with which this game is coated will leave most players ripping out great clumps of hair. It is a cardinal rule of adventure game design not to put a drawer in a room if one doesn't want players to open it; if something appears in a scene, one has to be prepared for players to interact with it. Over and over, *The Dark Half* breaks this rule and, in so doing, breaks faith with its audience.

There are more egregious examples as well, where this kind of design misstep actually affects the plot. In one scene, the player wants to remove a murder weapon (a bloody artificial leg) from the open bed of a truck, since doing so would help keep the police off Thad's trail. Unfortunately, even though the computer tells the player "You see Homer's artificial leg" in response to the command "Search truck bed," the leg does not show up in the graphic, making the command "Pick Up Leg" impossible to execute.

Later, one manages to open a locked china cabinet and is told that "There is a pistol inside." Alas, the pistol is not visible; much as one wants it, one cannot take it. (At this point in the game, I would have killed for the freedom simply to type in the command "Get pistol.") Telling the player that he has found an object or met a character and then, not giving him a way to get the one or talk to the other is the height of cruelty, an act of sadism of which George Stark could be proud.

When the player encounters characters with whom the computer does let him talk, the design is bungled as badly as it is in the rest of the game. The typewriter interface disappears, to be replaced by numbered dialogue choices. Why the choices are numbered is a mystery, since one is not permitted to select them by typing in the numbers. (Once again, everything has to be point-and-clicked.) The dialogue is badly written, mispunctuated and ungrammatical: "Digger is a old man," says respected novelist Thad at one point. In some dialogue sequences, care must be taken to say the right things, but in most, one will do fine simply by running down the list of options in the order in which they are presented.

Of course, this process is complicated by the fact that the computer usually kicks the player out of dialogue mode after each interchange, requiring the player to click on "Talk To" and the character (who may be all the way across the screen from the "Talk To" key) before asking each question.

In addition to the poor design (more remains to be said, but space is limited), the game has more bugs in it than John Gotti's dinner table. Consider: after Thad leaves the tavern for the first time, the graphic portion of the screen goes black. Is this because it suddenly got dark? Is Thad having a blackout? No, it's a bug — walking to the edge of the screen restores the graphics.

Another example: after taking all the objects out of the truck, try saving the game and then, restoring. All the objects will reappear in the truck even though they are already in Thad's inventory. Does this mean one can take them twice? No, but either way it's still a bug.

Finally, try this: when a certain waitress tells Thad to take a seat, sit down and then call up the save/restore menu. Select "continue." Note that there are now two Thad Beaumonts on-screen, one seated, the other standing. Is this an early visit from George Stark? No, it's a bug — the extra Thad vanishes after one move.

Half Is Not Better Than None

It is probably not worth harping too much on the numerous changes in the novel's storyline. Whether in the old Hollywood or the "new" Hollywood, meddling with a work occurs no matter how good the original or how weak the suggested changes. Here, changes have been made with all the delicacy one would expect from teenage vandals finger-painting on the Mona Lisa. Absent-minded prof Rawlie DeLesseps is turned into Reggie DeLesseps and made female. Victim #1, Homer Gamache, is beaten to death with his artificial leg rather than his artificial arm, even though the switch of prosthetics requires contortions in the storyline and leaps of logic. Law student Fred Clawson even becomes "drifter Fred Clawson" before the game is through.

Even more distressing than changes like these is the general dumbing-down of the story. For instance, the book's grueling toe-to-toe interrogation between Thad and the police, where Thad has to work like crazy to establish his innocence, is reduced in the game to a scene that goes something like this:

COP: We have your fingerprint in the dead man's truck.
THAD: I was framed.
COP: Well, okay.

In brief, everything that made *The Dark Half* an exceptional novel is missing from the game, as is anything that might have made the game an exceptional game in its own right. *The Dark Half* is not only a bad game, it is easily one of the worst games I have played in the last ten years, on top of which it is an insult to a fine work by one of our most underappreciated authors. To the extent that people will associate this game with the name "Stephen King," he will go on being unappreciated, and this is perhaps the greatest pity of all. CGW



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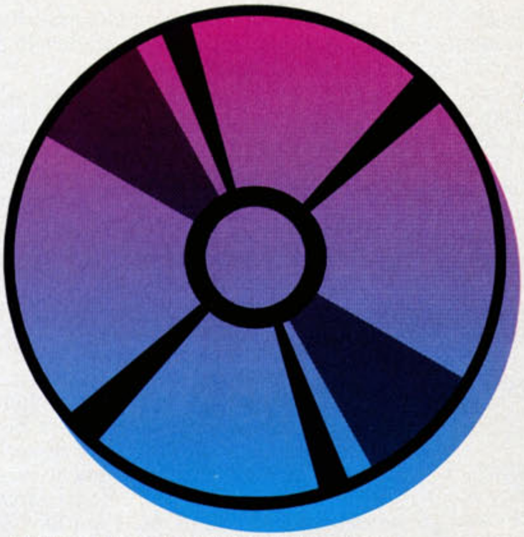
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A Designer Looks at the Old "New" Media

Seybold Seminars' Digital World

by William C. Fisher

During the summer, Seybold Seminars held the Digital World *conference in Beverly Hills, California. There were several new products and players introduced at the show. The following is a list of what we considered most enlightening.*

Radius VideoVision

One of the most exciting developments at Digital World was the board introduced by **Radius**. Originally conceived by **Apple**, the rights were sold to Radius. The unit supports video in and out, including S-VHS format, through an external breakout box. This product joins the SuperMac VideoSpigot, one of the best-selling hardware products of the past year, in providing immensely powerful video on home computers.

What's new about this board? The ability to output to videotape using 24-bit convolution. What that means is flicker-free video. Normally, output from a computer with a high-resolution display like that of the Macintosh flickers badly on videotape. Thin horizontal lines create havoc on TV. Convolution smoothes the lines so they don't flicker or jump around on the tape. It can be switched on or off at the flick of a switch, which makes for a very convincing demo. The result of this support for convolution is that anyone with a Macintosh and this board will be able to produce crystal-clear videotapes without the usual expensive video hardware.

This board will list for "less than $2,500." While that's not cheap, it's a lot less than the current studio alternatives. And don't forget that it's also a 24-bit video board. And, as did the Spigot on initial release, it will come with plenty of bundled software: *DiVA VideoShop* and *MacroMedia Action!*, advertised by Radius as an "$1,100 software value."

The net effect: *VideoVision* makes "desktop video" even easier than before. Every self-respecting game developer or multimedia producer needs at least one board of this type, even if just to play around. Not every game needs video, of course. But video power this great is a tool that can be used to create better software, in ways that may not be obvious today. Most important, the *VideoVision* is one more indication that personal computers will continue to expand their capabilities in ways which were almost unthinkable a few years ago. The pace of change provides huge opportunities for the kinds of visionaries who have made this such a great industry. Expect a lot more to come.



Compact Disc-Interactive (CD-I)

Digital World was held in the very shadow of Philips Interactive Media of America, the company that created CD-I. When it comes to CD-I, there are two kinds of people: True Believers and Skeptics. The True Believers are unfailingly optimistic about the future of CD-I and are very vocal about their belief that it will be the next major force in home entertainment.

The True Believers say:
There is a lot of money to be made in CD-I.
Large numbers of products are now being developed for CD-I, especially in Europe.
The CD-I unit is technically superior to computer-based platforms for "multimedia" applications.
More than 100 companies are developing compatible units. The market will really explode when Nintendo and Sega release their low-cost versions.
Philips understands that CD-I will require years before it becomes profitable, and they are willing to wait.

The Skeptics say:
The current installed base is probably between 5,000 and 10,000 units in the U.S. now. It is unlikely to exceed 50,000 units by the end of the year. If there is money to be made, it's in finding someone with deep pockets to fund the development of products for CD-I (like Philips). A single CD-I development station costs tens of thousands of dollars — enough to buy an office full of top-of-the-line IBM PC-compatibles or Macintoshes. And the tools are rather primitive compared to those available on those other platforms.
There are large numbers of people developing for CD-I. Yet, there are also many current software publishers who are holding back until they can justify the investment. Of those who are developing products, one person boasted to me about producing a disc for CD-I in eight weeks (with six people) using the latest authoring tools. What kind of disc? A library of digitized artwork. Whoopee. *Wing Commander* it is not.
The CD-I unit has some definite advantages of IBM PC and Macintosh "multimedia" units, such as multiple video planes and a variety of very nice sound and display mode options. Most of all, it has consistency. The specifications are set in stone. The Macintosh market, led by Apple, has done fairly well in standardizing, one of Apple's specialties. The PC market, as usual, is a fistfight of so-called standards promoted by competing hardware and software vested interests, most of which have received lukewarm interest. On the other hand, Apple is reportedly releasing new consumer machines this fall to compete with CD-I. Macintoshes, and most new IBM-compatible PCs, have their own advantages

patible PCs, have their own advantages in this field: much higher video resolution, greater software versatility, and greater computing power, to name a few.



Nintendo or Sega may just be the saviors of the CD-I format. Of course, this may also trivialize it, since the machine might be tarnished with a "kiddie game machine" image that runs counter to the "happy educated interactive family" image Philips is trying to promote. But it will certainly sell a large number of CD-ROM units into homes, which is critical to the success of the platform. The current unit is too expensive for the average consumer, especially in a protracted down market.

What was actually showing at Digital World in the CD-I arena? Development systems and developer enthusiasm. I didn't see any actual products on display. So far, I still maintain my original status as a firm Skeptic: I don't see any compelling reason why I, as a consumer, would want to purchase a CD-I unit today and I don't see why I, as a software developer, would want to invest my company's money in developing a consumer CD-I title. There is absolutely no money to be made in it now. However, I do see a potentially huge market for CD-I in the industrial training and education fields and for use in kiosks. As a delivery platform, it has excellent price/performance characteristics. If there's money in CD-I this year, that's where it will be found.

CD-ROM for Business and Education

The CD-ROM business is serious business. Although CD-ROM technology is still moving slowly into the mainstream PC market, it has long been a force in certain large vertical markets. There are literally thousands of CD-ROM discs on the market today.

The overall message is that producing a CD-ROM today is not a big deal at all. There are now a number of authoring systems for the IBM PC and Macintosh. There are companies that specialize in the pre-mastering and mastering of discs, and a number which will sell desktop systems for pressing "one-off" CDs for about $15,000. It has been done many times before. And the cost of hard drives and backup mechanisms capable of handling gigabytes of data is dropping rapidly. Finally, disc production costs are leveling off at very reasonable prices.

Of course, CD-ROM has its limitations. But double-speed drives are becoming available, and even higher speeds and higher densities reportedly are in the works. It has a long way to go before its technological franchise has expired.

The biggest question about CD-ROM, which has yet to be answered, is that of standards. Apple is likely to release new CD-ROM machines for consumers, along with their own standards. IBM PC-compatible hardware and software vendors are fighting over standards for their marketplace. So far, none has lit a fire with consumers and, without a reasonable installed base, entertainment producers will hold back from large investments in CD-ROM. CD-ROM is here, but it is not clear when we will start to see large amounts of entertainment software using it.

DVI, JPEG and MPEG

Huh? For those without their pocket acronym dictionaries handy, JPEG stands for Joint Photographic Experts Group. MPEG is Motion Picture Experts Group. These are both industry-wide committees attempting to create international standards. DVI is Digital Video Interactive, which is being promoted by Intel.

This year, we are finally beginning to see glimpses of the future of compressed video. What passes for video in the typical software product of today is jerky, chunky and slow. These new fancy acronyms are names you will hear more and more in the coming years as the quality of digital video, played back from ordinary CD-ROMs or disk drives, improves. These new techniques provide massive levels of data compression, throwing out parts of the video image that are (one hopes) not important. They are known as "lossy" compression techniques because some detail is lost in compression.

DVI is **Intel**'s system for digital video compression. It has been around for several years, but the cost of DVI hardware and the clunky nature of the compression process (you send your data to Intel and pay them by the minute) has limited its appeal. IBM demonstrated some very nice DVI across a network at *Comdex* last year on its UltiMedia PS/2 machine. DVI boards are available for both IBM PC and Macintosh users. The best thing about DVI is that it is available today, although DVI boards still cost as much as the rest of the machine. So far, it looks like MPEG will outshine it.

JPEG is now being used in some applications for digital video. Unfortunately, it's really intended only for still-image compression. **LSI Logic** showed a chip set at Digital World that compresses ratios as high as 50:1 or 60:1. Unfortunately, at that level, the image starts to deteriorate noticeably. A level of more like 150:1 or 200:1 is necessary for playback of video from standard CD-ROM. JPEG is not the answer for digital video.

MPEG is a still-emerging standard for digital video compression. It is computationally complex, and only this year have the first commercially available MPEG chips been produced. Demonstrated at the show was a sample of a music video compressed using a newly available chip set from **C-Cube Microsystems** (which has teamed with **JVC**).

It's worth the wait. The demo was amazing: scrolling of the entire screen, fast cuts between scenes, and none of the stairstep-like "thresholding" distortion so common on other compression schemes. I pressed C-Cube for details, and they assured me that the demo really was running at only 150 kilobits per second — CD-ROM data rate.

MPEG chips are still quite expensive, and the standard is not yet officially approved by any international standards organization. Plus, several more MPEG enhanced standards are in the proposal stages. This has delayed availability of parts. But the first hardware is here now, and we can expect some very exciting developments from it in the next few years.

What Wasn't There

Unfortunately, there were no CD-ROM entertainment products. It's still an emerging field, and it's hard to make a lot of money. This is especially true of the MPC platform, for which there are virtually no CD-ROM titles.

Commodore (CDTV or Amiga): there's not much coming from Commodore these days about CDTV. And the Amiga, a technological breakthrough, is rapidly passing from view in the high-end world of digital media (Amigas were not at all prominent at Digital World).

Conclusions

Digital World proves that digital media are real and already serious business to many companies, much further along than fields such as virtual reality. It's not yet down to the consumer level, however. And we still haven't seen the *VisiCalc* or *PageMaker* type of breakthrough product for digital media. Naturally, we all hope that these magical new capabilities will lead to even better games in the next few years. As far as I can tell, we have every reason to be optimistic. Stay tuned! CGW

Three Runs, Two Hits, One Error

Virgin Software's *Magnetic Scrolls Collection*

by Charles Ardai



The trouble with multi-game value packs is that too often they are nothing of the sort. Nothing is of less value than three, or five, or 20 obsolete games one doesn't want to play. Three bad games for the price of a good one is *not* a good deal. Yet, one always holds out hope. It is possible to imagine a good anthology of games — think of *The Lost Treasures of Infocom* or picture a megadisk containing all the installments in **Sierra**'s *Space Quest* series. If most anthologies are bad, it is because they are born solely of a publisher's desire to breathe new life into his moribund backlist, which is usually moribund for a reason; if anthologies are sometimes, though rarely, good, it is because there are some games out there that deserve to be resurrected.

The latest games to be dusted off, polished and served up fresh in this way are three of **Magnetic Scrolls**' ersatz text adventures: the well-known *Guild of Thieves*, the unjustly forgotten *Corruption*, and the bizarre *Fish!* Each comes from England complete with charming British spelling and vocabulary (one mustn't call a "torch" a flashlight, or a "checque" a check), and each has a nice, wry sense of humor (excuse me, humour) lacking in most American games. Alas, though, all is not well. This collection, like so many others, shows the signs of a job done too quickly. Among these signs are insufficient documentation, a muddled installation procedure and a title that couldn't possibly be any duller. Sadder still is the thrown-together, grab-bag manner in which the peripheral materials that came packed with the original games are presented. Where the original *Corruption* came with a poker chip, and the original *Guild of Thieves* with a lengthy, witty Guild "newsletter," the *Collection* comes with neither; what it does contain, somewhat arbitrarily, is a fish chart from *Fish!*, a map from *Guild of Thieves*, and a calendar page and audio cassette from *Corruption*, all thrown in the box willy-nilly with not so much as a label on each to indicate its provenance or significance.

TITLE:	Magnetic Scrolls Collection
SYSTEM:	IBM
GRAPHICS:	EGA/VGA
PRICE:	$59.95
PROTECTION:	Documentation Based
DESIGNERS:	Magnetic Scrolls
PUBLISHER:	Virgin Games Irvine, CA

In all fairness, though, these are small complaints, and none makes a difference once the *Collection* is up and running. The new games are as good as they ever were, aided greatly by the fluid **Magnetic Scrolls** interface, which allows players to arrange the game screen in any way they want. Each game function — text, graphics, inventory, self-drawing map, hints, compass — has its own window, which the player can create, destroy, resize or move at will. This gives the player total control over the games, which can be played as pure text adventures, as graphic adventures with all the modern conveniences or as anything in between. There are a few quirks, such as one's inability to call up a map window and a hint window simultaneously, but none are debilitating. The biggest problem with the interface is that the computer screen is not large enough to hold all the windows at once, so that a certain amount of reshuffling is always necessary. This is not a big deal.

There is no sound in these games, except for a short soundtrack included on the *Corruption* cassette, and though there is some excellent animation in the graphic windows, there isn't much. The graphics are wonderful but spotty (i.e. they don't always change when one moves from location to location) and, in any event, they are incidental to the gameplay. What matters is the text, the puzzles, the stories and the worlds in which the stories take place.

In the *Collection*, therefore, **Magnetic Scrolls** takes adventure gaming back to its roots, and it *works*. I was surprised at how quickly I fell under the spell of these three odd stories. At some point, early on, I stopped being a Detached Reviewer and became a Secret Agent Fish, a Would-Be Thief, and a Framed Yuppie.

Go Fish

It is difficult to say which of the three games is the best; this is a matter of personal preference, after all. If, on the other hand, one is trying to pick out the strangest game, *Fish!* wins hands down. In *Fish!* one plays a "daring interdimensional espionage operative" currently inhabiting the body of a goldfish for a little R&R. Shore leave (so to speak) is suddenly interrupted with a message from HQ: the terrorist group the Seven Deadly Fins is on the loose again. Three space warps

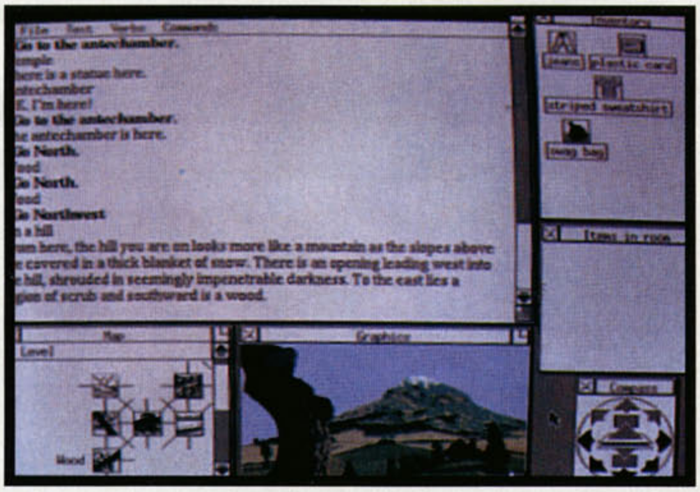
appear in the fishbowl, permitting one access to a recording studio, some hippie-filled ruins, a forest with an exploding bird in it and lots of other peculiar places.

It is a little tough to get oriented in this game, because things are just a shade too crazy. Unpredictable is good; incomprehensible is not. Some of *Fish!* is seriously incomprehensible. However, when it makes sense (as well as when it doesn't, but is at its silliest), the game can be fun.

Puzzles are of the "how to placate a screaming record producer who wants his coffee" school rather than the "how to slay a dragon" school, and if nothing else, this makes the game original. *Fish!* also offers the most clever gags of the three games, such as a bit with a crystal tuna (used to tune a crystal, of course) and a scene where the player finds a computer that is running *Fish!* itself.

Stop, Thief!

Guild of Thieves is both the best known and the most conventional of the three games. (I don't care to speculate on whether there is a connection.) Taking place in a moderately *Zork*-like environment, the game also has a moderately *Zork*-like plot: the player, eager to be accepted into the infamous Guild of Thieves, is given the test of denuding a certain patch of the Kerovnian countryside of all its valuables. In all, the player has to collect 14 treasures, stowing them in convenient "nightsafes" for safekeeping.



Gameplay is, of necessity, episodic. The map is larger in this game than in either of the other two, as well as being more unified — no space warps here — but each scene has very little to do with each other scene. Each location offers a different puzzle, and one's role is simply to go from location to location, solving each puzzle and picking things up, as adventurers have done since *Crystal Cave*.

The puzzles are pretty good, requiring a certain amount of ingenuity (especially to get past some wicked deathtraps) and a little interaction with other characters. None are particularly memorable, though. The game is good, but lacks the spark of innovation that would elevate it above the level of dozens of similar games.

The Seven Deadly Sins

The third game, *Corruption*, is the one clear winner in the package. It tells a story that takes place in modern London and which could have been lifted out of today's headlines. The player is Derek Rogers, a yuppie lucky enough to have been named partner in a growing trading firm. Derek has his own office, a dutiful secretary, a spot in the basement carpark and a beautiful wife. Unfortunately, he also has a partner who is up to no good — up to all sorts of no good, in fact, and eager to pin it all on Derek.

The bad news starts when Derek finds a bag of cocaine in the bathroom. Then, there is the matter of the queer affidavit he finds, exonerating David of any charges of insider trading before any such charges have even been raised. This followed by the spectre of an illegal casino operating in the middle of London, as are alleged episodes of adultery, book-cooking, drug dealing, and medical malpractice, all of them threatening to collapse on poor Derek's head.

To get out of all the frame-ups, Derek has to fight fire with fire. Before too long, players will find themselves stealing documents, eavesdropping on phone conversations, breaking into safes, beating up policemen, breaking out of jail, wearing a wire to expose corruption, turning in their "friends" and (gasp!) crossing the street against the light.

All of these activities and their results are described with a sharp satiric edge. *Corruption* is a pit bull of a game, sinking its teeth into the player's psyche and not letting go for a second. Think: what other game has ever said, when the player looks in a mirror, "You see an ugly face"? Where else has a game character said, in response to the command "kiss her", "Get off me or I'll report you for sexual harassment?" *Corruption* simply doesn't pull any of its punches.

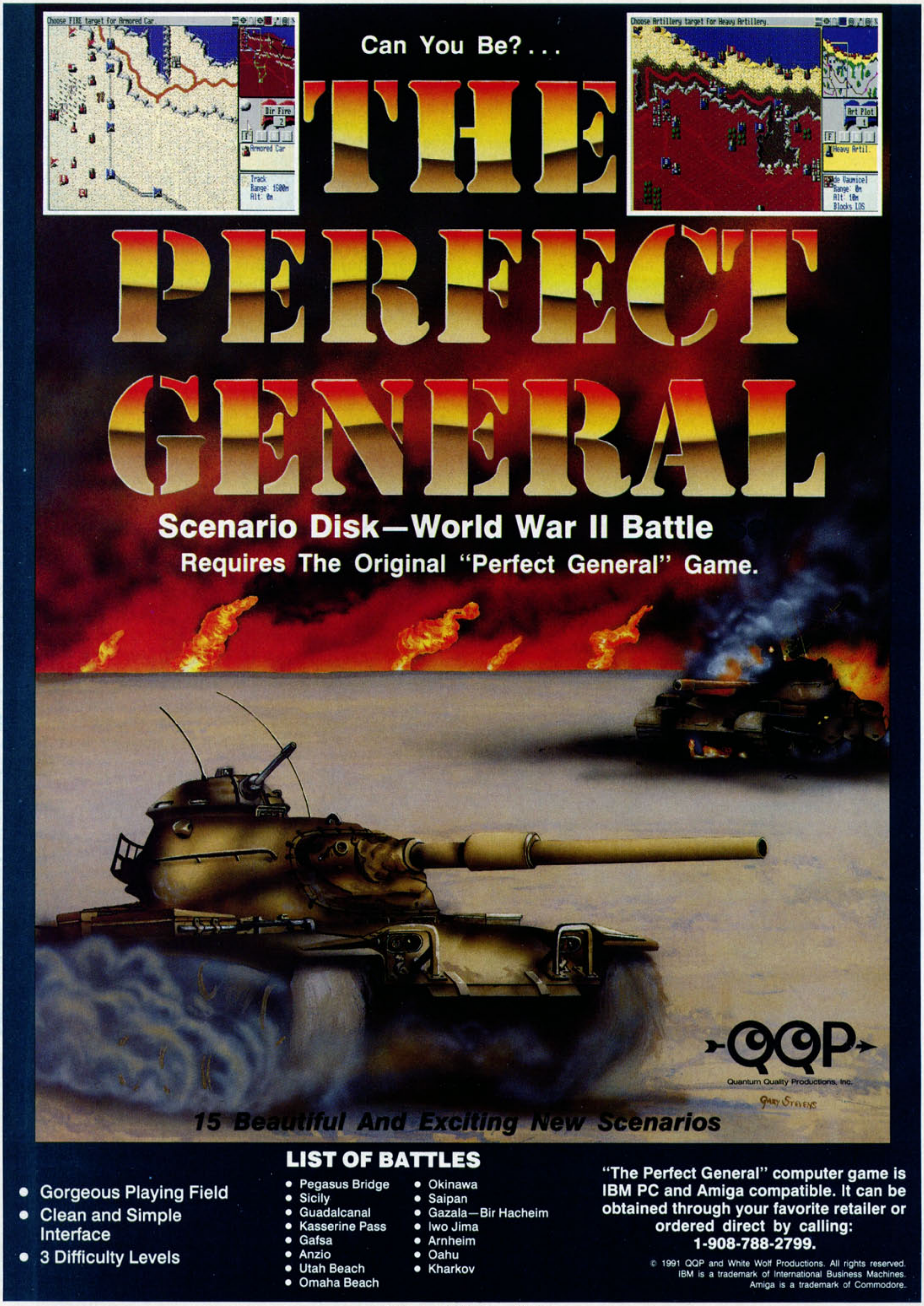
The main drawback with *Corruption* is that it is very short. (It is hard to imagine the game sustaining its level of intensity at greater length, though.) Staunch moralists might also take exception to a game that requires players to behave in seven immoral ways before breakfast, especially in light of the fact that, while the original *Corruption* package carried a warning that it was for adults only, the game is included here, warningless, with two games which would be just fine for kids.

I would submit, though, that a game this powerful deserves the widest possible audience, and if that means that a few kids will be exposed to semi-adult material, so be it. There is nothing vicious or pornographic in the game, just a lot of dark truths about the ways of the world. *Corruption* may be the most cynical game ever made, but it is not, I believe, a corrupting influence in itself.

Three And One

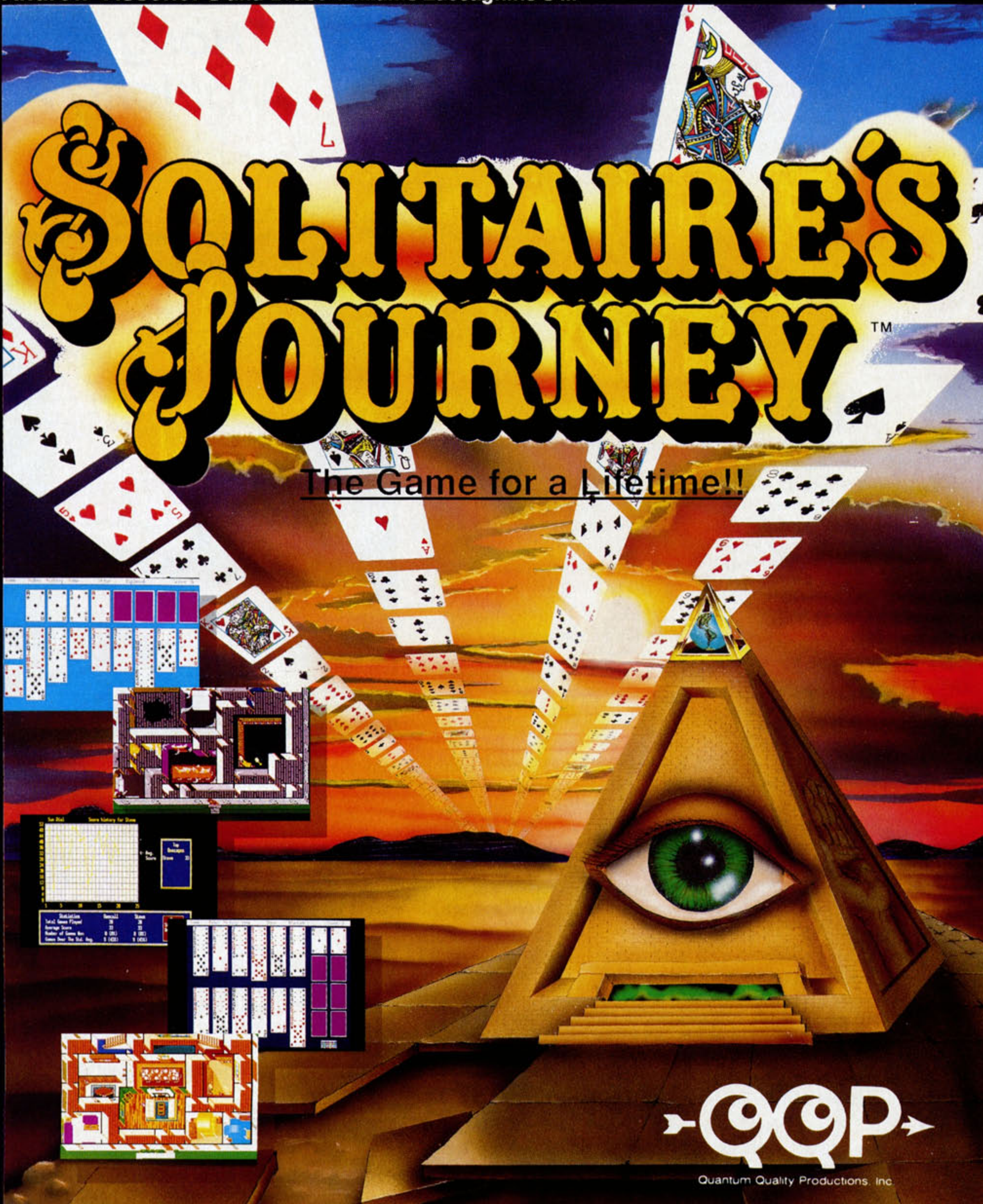
Perhaps the biggest problem with the *Collection* is that the three games it contains have no reason to be on the same store shelf, much less in the same box, except for the trivial fact that they share a game engine. (It's akin to putting "Citizen Kane," "Fritz the Cat," and "Superman III" on one videocassette because they are all movies.) One game is a straight fantasy, one is an absurdist farce, and one is a hyper-realist drama. They sit in the box uncomfortable with each other; thematically, they practically repel each other as do the opposite poles of a magnet.

People who love old-fashioned adventures will probably enjoy all three. People who value unusual, exceptional games will love *Corruption*. The irony is that people will probably pick up the *Collection* because of *Guild of Thieves*, but will be glad they did because of *Corruption*. *Fish!* is the odd man out, neither popular nor good; it is the one of the three which will be left (you'll pardon the expression) to flounder. Yet, two out of three is not a bad showing. As anthologies go, *The Magnetic Scrolls Collection* may not be a home-run slugger, but it is a consistent line-drive hitter. CGW



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Hong Kong Mahjong Pro

by Scorpia

TITLE:	Hong Kong Mahjong Pro
SYSTEM:	IBM
PRICE:	$49.95
PROTECTION:	Documentation Look-Up
DESIGNER:	Julian Robert Fitch
PUBLISHER:	Electronic Arts San Mateo, CA

Most people have heard of Mahjong (Chinese for "sparrow"), but have never played it. The game was very popular for a time during the 20s, but then died out for various reasons, not least of which was the growing complexity that resulted as players made up their own "house rules" for the game.

Today, the closest many have come to Mahjong are games such as *Shanghai*, which use a Mahjong tile set, but are really nothing like the original. Now, **Electronic Arts** brings us *Hong Kong Mahjong Pro*, and it's the real thing.

As the title suggests, *HKMJ Pro* uses the rules and tile set that are generally accepted by *Mahjong* players in Hong Kong. Those who already know the game may thus find it a little different from what they are used to, but still should have little trouble adapting to the rules.

Despite its exotic flavor, the basics of Mahjong can be learned in a few minutes or so. The game uses 144 tiles, comprised of three suits (bamboo, circles, and characters) numbered 1 to 9, four winds (north, south, east, west), three dragons (red, green, white), and four flowers (which correspond to the four winds). There are four of each tile, except the flowers, of which there are only two apiece (one red set and one blue set).

One of each wind is put face down on the table and each player picks a tile. Whoever gets the East Wind will start the hand. All the tiles are now mixed face down and stacked around the edge of the playing board to form the wall. Three dice are thrown by the East player to determine the starting point along the wall from where tiles will be drawn. Each player draws 13 tiles for his or her starting hand.

Players then choose and discard tiles to build sequences, such as 1-2-3 of the same suit (called Chow); three of a kind, for instance three red dragons (called Pong); or four of a kind (called Kong). A winning hand generally consists of four such sets of tiles, plus a pair of any kind. Tiles taken from the wall can be kept in hand, but a discard picked up from the board must be melded immediately into a chow, pong, or kong and placed face up on the table.

Play proceeds around the table counterclockwise until either someone wins the hand or all tiles have been drawn from the wall with no winner, which is called a dead hand. After any winnings have been



paid, the tiles are mixed, built into a new wall, and the next hand begins.

That's pretty much what Mahjong is all about, and *HKMJ Pro* recreates it all quite nicely. One begins by choosing three opponents from a pool of twelve. These computer players are, in fact, based on real, live Mahjong players, whose digitized portraits and voices are used in the game.

The choice of opponents is very important, since that determines the difficulty of the game (some are better at Mahjong than others) as well as the minimum number of points needed to win. Novice players are advised by the manual to start off with the default trio of Christopher, Wing Yin, and Miko, and that's good advice. Until one has some experience and is able to keep track of points correctly, one doesn't want to be in there with sharks like Uncle Chen and Wong Ho Ming.

Next comes the choosing of the winds (the player gets first pick), followed by the appearance of the Options menu. This menu allows one to turn the sounds, voices, and music on or off, as well as set the game speed (how long a discarded tile can sit on the board for someone to pick up), review the scoring rules, put "extra markings" (English numerals and words) on some of the tiles for easier recognition, and see what one's running total of winnings or losses are to that point.

Then, the game proper begins. Each player re-

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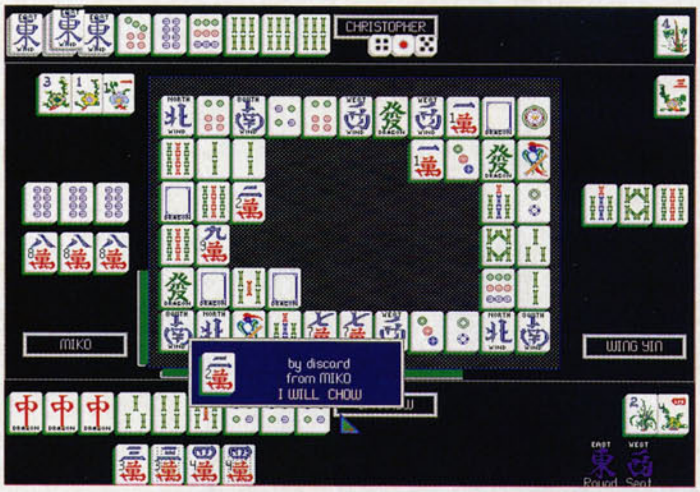
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ceives 500 chips with a default value of $1 (this can be changed to either 10 cents or 10 dollars), East Wind rolls the dice, starting hands are dealt to all players, and the game begins.

The initial hand of tiles drawn rom the wall is automatically sorted by the program, like tiles together and in numerical order where necessary. Tiles drawn from the wall later on that one decides to keep will likewise be inserted in the proper place in one's hand.



Everything is handled smoothly through a mouse interface, using both the left and right buttons. The left button is used to click on tiles for both discarding and picking up. The right button is used to skip the "waiting period" when a tile is discarded and one knows they won't be taking it.

If voices are on, one hears the opponents say "chow" "pong" "kong" or (most dreaded) "I win!" at the appropriate times. If the hand ends with a win, there will be short digitized animations showing the "thrill of victory" for the winner, and another showing the "agony of defeat" for whoever tossed the winning tile (such a person pays double chips to the winner). Since there aren't, of course, any portraits or voices for the human player, all that happens when the player wins is that a special tune is played (each player has his or her own signature tune that signifies victory).

At this time, the winner's hand is displayed, along with a scoring menu showing how the hand's points (if any) were totalled. From here one can go on to the next round, return to the main menu to choose new opponents, or quit entirely by exiting to DOS.



For those who have never played Mahjong before and want some initial experience, *HKMJ Pro* includes a separate tutorial program. It plays exactly like the regular game, except the Mahjong Sparrow (which sits in the right-hand corner of the screen) gives one a lot of help, and one's opponents are always Christopher, Miko, and Wing Yin.

In the tutorial, Sparrow will always advise the player when someone makes a discard he can use. Play halts while a box displays a text message saying what the tile can be used for. Sparrow can also advise the player on discards; clicking on his symbol causes him to hover briefly over the tile he wants the player to throw out. In between hands, little pop quizzes show up, asking questions on the rules and scoring of Mahjong, to see how well you're picking up the game. Wrong answers carry no penalty, and if you're wrong, the correct answer is shown. Sparrow can also play the entire hand for the player (this is demo mode), which is interesting to watch, but not as helpful as simply using him as an advisor. The best way for one to learn is to do it oneself, with a little assist from a feathered friend.

Graphically, the game is well-done. All the tiles are clearly and sharply delineated, the screen layout is good, and the digitized pictures are very nice, including the garden and Hong Kong harbor scene that alternate on the playing board. This is one of the few games on the market that supports 640x480 256-color SVGA mode, provided one uses an expanded memory manager such as EMM or QEMM and have at least 2 meg RAM. One should definitely choose SVGA if one has it on his or her system.

This excellent product does, however, lack a couple of features that should have been included. One is the ability to explicitly set the minimum points for a winning hand. In Mahjong, one can have a winning hand of no particular value (worth 0 points), also known as a "chicken hand." For more demanding play, a hand worth at least 1 or 2 points can be required. Unfortunately, the only way to get that in *HKMJ Pro* is through the opponents one chooses for a game. There is no way that one, personally, can say "We will play for a 1 (or 2) point hand."

The other omission is a way for players, especially novice players, to keep track of how much their hand is currently worth. There is no facility in the program for this; players have to tote up the point value themselves, and it is all too easy for a beginner to make an error or two as to how much a hand is worth. An option to have a "point counter" active would be welcome.

Outside of that, there is nothing to fault in *Hong Kong Mahjong Pro*. The program itself ran flawlessly, first time, every time. No bugs or oddities were evident over many sessions played (a rarity in these days of problem-ridden releases).

The computer opponents, to the best of my judgment, played up or down to their skill descriptions as given when they were chosen. One can therefore tailor a game to be as "easy" or "difficult" as one prefers, always keeping in mind that luck does play a part in Mahjong. Still, even a poor opening hand can be turned into a winner with the right play.

If one has ever wanted to learn Mahjong, or one already is a Mahjong player with no local opponents, this game is well worth looking into. While nothing can beat sitting down with three live opponents, *Hong Kong Mahjong Pro* is the next best thing to it. CGW

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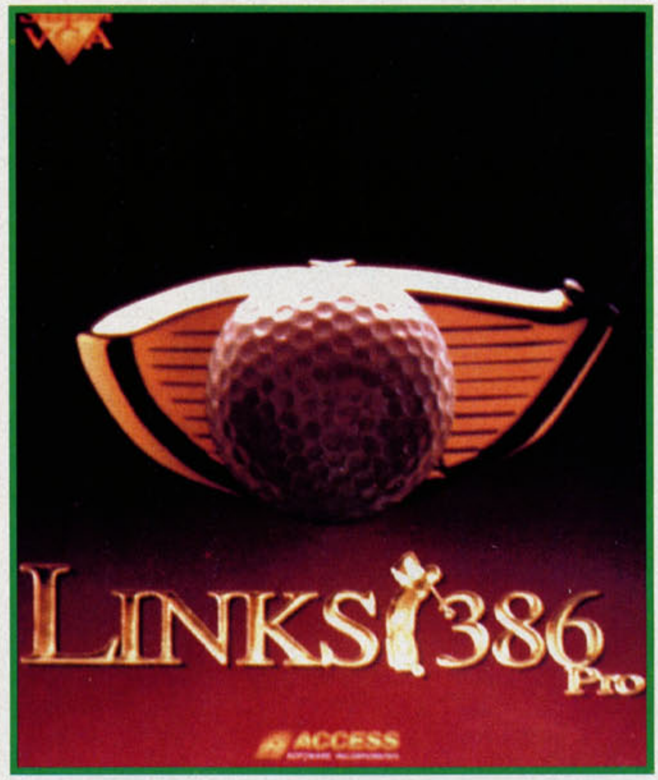
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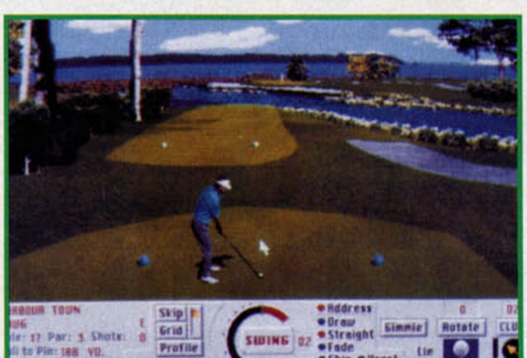


by T. Liam McDonald

T. Liam McDonald is the co-author of Sun Tzu's Ancient Art of Golf *(Contemporary Books, November) and the forthcoming* Myths to Golf By.

TITLE:	Links 386 Pro
SYSTEM:	IBM w/ 386SX/16 Mhz 2 MB RAM, 12 MB on Hard Drive, mouse, SVGA
PRICE:	$69.95
PROTECTION:	None
DESIGNER/PUBLISHER:	Access Software Salt Lake City, Utah

Announcer (sotto voce): *It's a lovely day out here on the back nine at Harbour Town. The wind is blowing out of the east at five miles an hour as the crowd's favorite, Arnie, steps up to the tee. He takes a moment to check the overhead view of the fairway and meditates briefly upon his approach strategy to this long and arduous fifth hole. His caddie suggests a number two driver, but Arnie decides to play it short and easy with a one wood in order to get by the tricky water hazard left of the dogleg. It's a daring move, but will it pay off? After his ritual two practice swings, he addresses the ball, sets his feet and swings. The shot draws into the wind, cruising a respectable 232 yards before rolling to a wonderful lie 90 yards short of the green. Let's look at that shot again from the reverse.*



The hushed voice of the announcer is one of the few staples of professional golf which is *not* included in *Links 386 Pro*. Other than that, almost everything a desktop duffer could possibly want is included in this lavish, multifaceted game. The fans of *Links* spoke and **Access** listened. *Links 386 Pro* is the result.

Right from the opening screens, it's easy to see what all the hoopla is about: textured, Super-VGA graphics create a stunning backdrop for game play. Like a constantly refreshed, constantly shifting snapshot of a course, the graphics recreate the finest level of detail yet seen in *any* simulation. Shading, shadows, clouds, ripples on the water: everything's here. The limits of the medium have been stretched as far as they go, and it is only these limits that prevent even more detail, such as the trees and water being gently blown by the breeze. In time (maybe for Links CD-ROM?), we shall surely see this as well. (Maybe they can even fix that bug where a golf player stands on water when shooting near a water hazard).

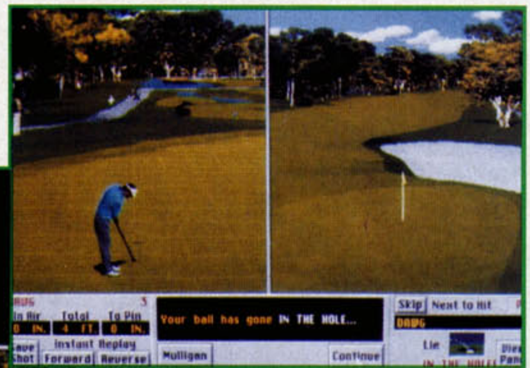
Ambient sound and random sound effects—croaking frogs, crickets, whispered comments by the golfers—round out the creation of a day at the links. Contrary to what the manual—otherwise a monument of clarity and accuracy—says, there are *some* female voices available. Be warned, however: most shots by female golfers prompt male comments. **Access**'s debatable logic is that the female golfers are accompanied by men.

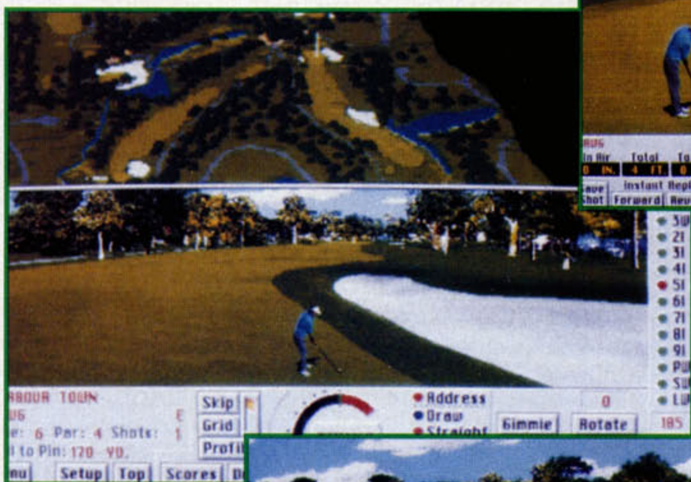
Fairway (Game Play)

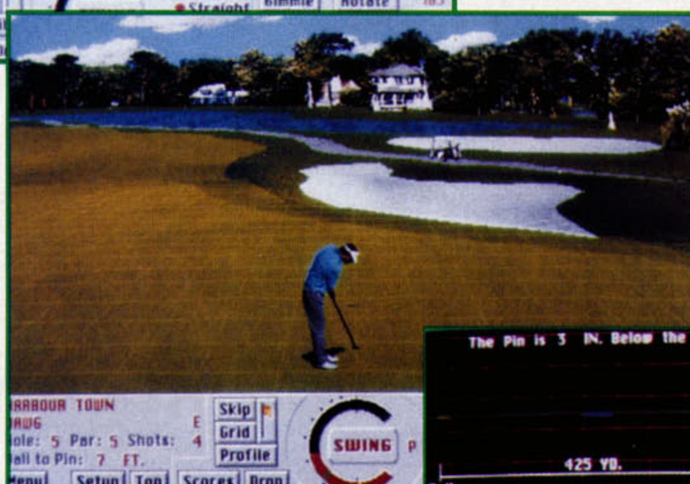
Okay, so it's a *pretty* game that's nice to look at and features effective use of sound. Yes, it is impressive for the level of detail, but how does it *play*? No matter how attractive a game

is, the final word is in features and playability.

Rest assured that the final word in golf—for now, at least—is *Links 386 Pro*, and it is quite likely that the only thing to ever beat this game will be yet another version of *Links*. The golfing engine is a dream come true, with an unprecedented level of control over swing, positioning, club facing, and







such nuances as drawing, fading, and even the position of the golfer's feet.

A click of a button zooms the pin position directly to the golfer, and aiming is a snap with the aiming pole. Depending on the strength and direction of the wind, the golfer can draw (a "controlled" hook left) or fade (a controlled slice right), hit straight and control direction by use of the "club facing" feature in the Setup box or, alternatively, be daring and use the power bar to determine in-flight ball direction. Two user-defined swing definitions can be added to the control bar for easy access, complimenting the draw, straight, fade, chip and putt options already available.

Another major overhaul of the *Links* engine is the addition of multiple user-defined windows. The screen can be configured as a single window showing the main screen, divided in half horizontally or vertically or, even split into fours. One can display the teeing box and the approach to the green, club distance chart, score card, top view, or terrain profile in any position the player desires. One can hit the ball from the tee and watch it soar toward the green, while keeping the overhead view handy in order to plan the approach or the club distance chart to be able to choose just the right club for the job. It is possible to put up four windows or just one. It's player's choice in this game.

It should be noted that the overhead view, score card and profile are all available from buttons on the control bar. **Access** has also added the nice touch of giving the average distances of each club when displaying the "club selection" panel. A tiny close-up showing the lie of the ball is also included in the control bar with a description of the surrounding terrain (sand, rough, etc.).

Further major upgrades exist in the form of replays and recorded players. Shots can be replayed from straight ahead or a reverse angle, and particularly good shots can be saved with a save shot option. Of course, if one is not satisfied with saving a single shot, *Links 386 Pro* lets the player record an entire round and save it to disk.

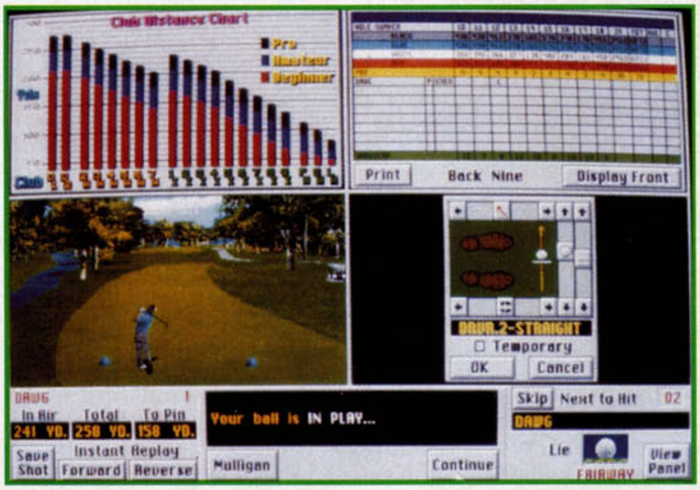
One can even copy it to floppy and send it to a friend, since pregame options allow "live" players to play against recorded ones or for one to just sit back and watch multiple recorded players compete against each other. While this may lack the immediacy of modem play, which is not supported, it sure won't eat up more than half an hour of phone time and allows multiple players to compete in tournaments at any time. More than a dozen pre-recorded games are included in the package, courtesy of the design team. One problem with this option, however, is that someone using the amateur tees can compete against someone using the professional tees, creating a rather lopsided game. Then again, that's what handicaps are for.



Hazards (Problems)

Not everyone is in love with *Links 386 Pro*. First, anyone with less than a 386SX with 2 MB of RAM and, at least, 13 megabytes free on the hard drive shouldn't even think about purchasing this game. Naturally, more RAM and faster computers speed up redraw time. Yet, I saw no appreciable difference between playing with 4 MB of RAM and 8 MB on my 386/40. Redraw time in full-screen, full-detail mode was still about ten seconds. Fortunately for those with slower 386s, various options can be turned off to speed play, but few people purchase a *Links* game in order to turn off detail.

Second, there has been a lot of grumbling on **CompuServe** about the ridiculously low scores of which most players are capable in *Links 386 Pro*. 18 hole totals under 60 are *very* common. **Access** has responded with a "you must have practiced to get such a low score" attitude, much to the displeasure of the low-scoring course hounds. It is possible that this unprecedented level of control over so many aspects of the game have made high scores easier to achieve, or it may be that **Access** has not programmed a marked enough difference between the beginner, amateur, and pro levels.



New courses are being planned (including some hush-hush deals being made for English and Scottish courses), and old courses are being slowly upgraded to SVGA. For those who already own the VGA versions, they can be converted for use with the *Links 386 Pro*, though of course they won't look as good as the SVGA courses. The game comes with the Harbour Town course, Barton Creek is available at $24.95, and Mauna Kea, Hawaii and Banff Springs, Canada are in the works. Unlike the *Jack Nicklaus* series, *Links* has no course designer nor does it intend to develop one. Instead, they plan to concentrate their efforts on releasing a new course every two months. They are also considering a CD-ROM version, possibly for 1993.

Green (Conclusion)

With the deluge of golfing games out there now, it's difficult to decide just which is best. If one has the hardware and if designing custom courses is not important, *Links 386 Pro* is truly *the* computer golfing experience. Indeed, the only really important aspect of the golfing experience that's missing from the game is the 19th hole. Maybe as an add-on disk? **CGW**

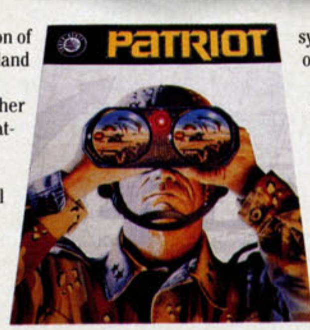
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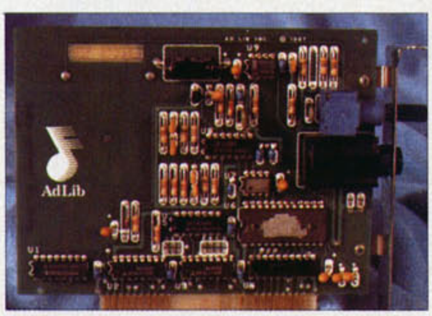
by Ken Allen

Ken Allen *has been composing for over twenty years. His game related contributions are included in titles released from* **Sierra On-Line, Dynamix, Accolade, Ballistic and Tsunami Media**. *Ken is a non-smoker (unless he's on fire), claims that it's not red-meat but the bluish-green-meat-with-fuzzy-stuff-growing-on-it that's dangerous to eat, and makes fun of anyone who thinks that political commentator Mark Russell is a gifted musician.*

Yesterday

Remember *Pong*? A coin-op *Pong* game could be found in the lobby of a nearby airport, and I would find any excuse to trip out there in order to challenge the upright-coffin-sized-box-with-a-TV-screen-and-a-little-knob to a game that would inevitably result in "GAME OVER." I plugged many a quarter into its happy little slot in order to play surreal table-top tennis whose primitive graphics were accompanied by the bleeps and bloops of equally primitive sound effects.

The world of video-gaming has evolved



quantum leaps since *Pong* and this progress has taken graphics and sound right along with it. When the Commodore 64 hit the market nearly a decade ago, it was practically assured of becoming the dominant game computer of choice, but not because it was easy to program (ask any programmer) or because it had superior graphics (about equal to Atari 800, TI-*99/4a* and Coleco Adam). Yes, it did have more memory, but the C-64 also had a built in synthesizer circuit, called SID. SID was similar in some ways to the **Adlib** sound card found in many gamer's PCs. Game creators could now use more authentic instruments and better sound effects in their game soundtracks for the C-64 than ever before.

This Morning

The interim that has transpired since then has provided computer game players with a wide palette of sound support. Today, however, computer game companies are at the jumping-off-place to the next plateau in interactive entertainment. CD-ROM is quickly gaining acceptance on the coattails of its adoptive parent — Windows Multimedia. This "new plateau" of interactive entertainment is on a level of such sophistication, that professional video and audio studios are being utilized to meet the lofty expectations of game designers, their bosses and the consumers they serve.

Gone are the days of programmers-who-can-do-art-or-music-so-let's-make-a-ga me (thank the Divine One). Don't get me wrong — some of my best friends are programmers (really!). Computer game companies that have a well informed vision of our industry's future recognize that, in order to stay competitive, they must employ professional artists, animators, story editors, screenwriters, video and sound technicians, and composers. I'm one of these composers involved in supplying music and sound effects for some of your favorite games. I have the dubious honor of making funny noises for a living, but I think most will agree that, as a computer game composer, I also have the most enjoyable profession in the industry.

So, What Is Involved In Putting Music Into Games?

Glad you asked.

Writing music for computer games is similar to writing for theater, television or film. But, theatrical forms of entertainment require the musical tasks to be predefined in a linear fashion. Soundtrack requirements for computer games, on the other hand, must conform to the interactive decision-branching nature of a computer game and *this* can foster poor musical continuity unless the composer pays very close attention to the game design. It really helps if the composer is, not only computer literate, but computer-game literate as well.

Each computer game *genre* requires music to be implemented in a unique way; arcade action requires music to repeat without getting monotonous, and music for a cinematic scene in an adventure game has to be specific enough to complement the scene (for example: building tension) while being generic enough not to frustrate the gamer in the event he/she doesn't solve certain puzzles in a specific order or within a certain time frame. Because of the nature of computer games, a composer must exercise creative restraint, more so than composing for other forms. Listen to Beethoven's *5th Symphony in C Minor*, first movement. As the musical themes develop and interact, it feels like a roller coaster ride, but (and this is important) the music is on track to a musically predictable ending at a musically predictable time. Movies unfold before an audience in the same way; timing is everything. A composer for computer games, however, does not always have that luxury.

Game Designers Must Have Clear Vision

I remember writing the music for the climactic battle sequence in **Sierra**'s *Kings Quest V*. The scene depicted King Graham in a battle of magical might against the evil wizard. The art director choreographed the entire scene and described the elements of the battle in very cinematic terms. He wanted the heart to palpitate as the game player raced to solve the puzzle for the scene. I created little musical building blocks for each scene element and, like a jigsaw puzzle, everything came together (art, animation, story, choreography, sound

and music) to form the exciting battle finale.

Each game designer has their own way of describing the music requirements for their game. If the designer communicates well, their vision for the game becomes contagious. On the other hand, I've also worked on projects where I've composed the score based on a list of songs I received over the phone or fax machine without being privy to the game's story elements — and later, after having had a chance to see the game in its shipping-version, I thought "Wow, had I known more I'd have done things a little differently!" It is most common that I work from a design document that has storyboard sketches, room and puzzle descriptions, and character sketches (and sometimes even a video tape of completed animation), but I always try to meet with the designer to can catch his or her vision of the game. What's important is that every detail of the game, as well as the overall ambience of the game, be communicated to the composer.

Avoid The Rut - Know Your Forms

As a composer, I cannot afford to get caught in a rut. I remember hearing a "rut" described as a grave with the ends kicked out. Currently I'm working on five computer games, one of which is *Starflight III* (**Tsunami Media** and **Electronic Arts**). In *Starflight III* you can visit various space stations and, on each station you can visit the bar. The game design calls for a different lounge act for each respective starbase's lounge. The game animators created three very different musical acts — a band of spider-like aliens playing music on giant web-like instruments, another band of cowboy tribbles playing more conventional instruments, and, finally, a solo keyboardist act with a four-armed performer who looks like a 70's throwback. The spider band plays a light-hearted sinister piece played on plucked instruments. The tribbles band (called the Lune Rangers) plays a bluegrass banjo tune, and the four-armed 70's guy will play a disco-baroque-hip-techno-funk-fusion-rock tune. Great fun! But the lesson here, boys and girls, is that a composer must be a student of *all* musical forms or may starve wishing he had been. (Composers must obey another rule; if you want to write good music, you must write music every day.)

MIDI, And Other Forms Of Wildlife

Modern composing is often done using a MIDI sequencer, which is a software program that is to music what a word processor is to document preparation. I would estimate that 80% to 90% of popular music recording is done with MIDI instruments connected to a computer running MIDI sequencing software. Occasionally, I'll resort to using music paper, but, if I don't need it, I won't use it. The industry standard MIDI sequencer for PC compatibles (the one that I use) is called *Sequencer Gold* (**Voyetra Technologies**). Most PC sound cards on



the market today are shipped with a pared-down version of the Voyetra sequencing program called *Sequencer Jr.* at no extra charge, putting song production in the hands of thousands of computer users.

When the song is saved to disk from a MIDI sequencer program, only the performance information, not the audio sound, is stored. It is the sequencer song files that are shipped with a computer game; the song file will be played by the game engine on whatever supported sound card is installed in the PC.

The current batch of sound cards available to the PC game player and the present state of PC hardware does place certain limits on what a computer game composer can do for a game. More often than not, hardware is my chief opponent. Then, when the hardware limitations have been addressed, having music play on the various sound platforms elevates the challenge further. The current convention requires that I compose for four music platforms on the PC: **1)** single-voice speaker, **2)** Tandy-IBM *PS/1* 3-voice, **3)** Adlib/Sound Blaster 2-operator FM, **4)** 4-operator FM (Sound Blaster Pro/Pro Audio Spectrum), Roland *MT-32*, and General MIDI. The MT-32, 4 operator FM and General MIDI share the same music performance data, but each do have their respective set of eccentricities which require consideration.

Programming customized sounds for these musical devices requires an additional set of skills; synthesis programming. The Roland MT-32, for example, has 127 instruments in its ROM sound bank and a complete percussion section. Even with all

(Continued on Page 86)

Define Your Terms!

MIDI

Musical Instrument Digital Interface. It is a communication standard for the electronic music realm, like RS-232 is for telecommunications. MIDI allows you to play the keys of a **Yamaha** *Clavinova* to hear the internal sounds of a **Roland** ***MT-32***, record and edit the performance on software from **Passport Designs** via a MIDI interface card manufactured by **Sound Quest**. Boy, talk about cooperation!

A MIDI sequencing program requires that a MIDI interface be installed in the computer and that it be connected to a MIDI keyboard (or other MIDI controller). In the same way that a word processor keeps track of keystrokes to store the document contents and format information, a MIDI sequencer keeps track of the keypresses (or performance information) from MIDI keyboard.

No audio recording takes place, just the note-on/note-off information exchange, along with some other commands, like volume settings, stereo position, damper peddle, bender wheel, etc. When the MIDI sequencing program is instructed to replay the performance, the performance is played back identically (for all practical purposes) to what was recorded. One of the biggest benefits to using a sequencer is the ability to edit in fine detail what was played.

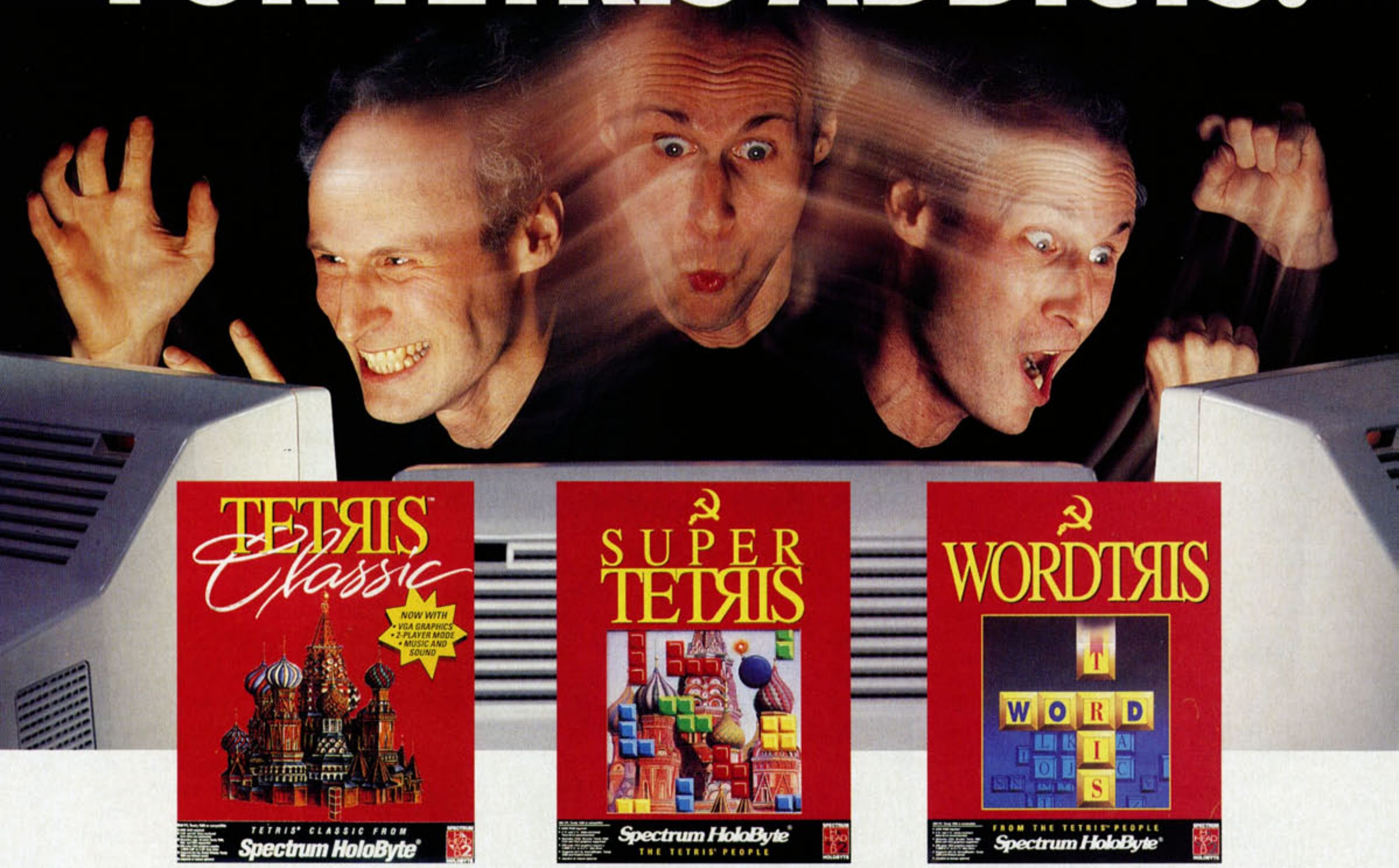
MIDI is also being used to control reverb effects modules, automated mixing consoles and even stage lighting.

General MIDI

General MIDI is the new arrival in the computer game playing arena that deserves some serious consideration. General MIDI is just an additional set of pre-agreed minimum standards that sound devices adhere to. For example, in the General MIDI sound bank, instrument #1 will always be Acoustic Grand Piano and instrument #115 will always be Steel Drums. General MIDI is the music portion of the MPC standard, that describes the hardware minimum requirements for the current MS-Windows multimedia industry standard. That way if you buy the Binford 2000 Hyper-Mega-Ultra-Orchestra Multimedia Philharmonic sound card from the Big Sound Wave company for $1999.99, and your neighbor buys the Humble Little FordPintoOfSoundCards sound card from Bargain-noiz R Us company for only $79, and both are MPC certified, then both of you are assured of hearing the soundtrack as composed for General MIDI.

Supporting the General MIDI family is practically transparent to the composer and the end user; it is the sound manufacturer who does all the hard work. What also makes General MIDI/MPC a nice entry is that the standard also requires at least one digital audio circuit, for sound effects or speech, be available.

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Circle Reader Service #132

AFFORDABLE VR BY 1994

by Craig E. Engler

When **W Industries** introduced its *Virtuality* system to the public, it took cyberspace out of the NASA labs and put it into the arcades. For the first time anyone with a few dollars could go out and try Virtual Reality and, at least in the beginning, a lot of people did. While the novelty of that particular system seems to have worn off, it's shown that VR represents an entirely new gaming medium rather than just a new game.

Like the console or computer industry before it, VR promises big payoffs to the companies who can come out with a successful home system. Already there are, at least, half a dozen companies with plans in the works and, in many cases, they're willing to bypass the arcade market altogether. The feeling in VR circles is that a home system will have to cost less than $500, come with at least one game and have an immersive hardware system with graphics equal to that of current video game consoles. While Virtuality accomplishes most of those technical feats with a price tag of $60,000, comparable units at one hundredth the cost are only a year or two away.

The idea behind VR is to create a three-dimensional environment that a player can interact in. While the environment itself is generated by computers, it's accessed by a pair of stereoscopic goggles and a data glove or joystick. The goggles allow wearers to look into the 3-D environment as if they were actually there, and the data glove gives them a virtual tool so they can interact with it. It's literally a first person perspective that puts gamers inside their games.

While it may sound complex, the first piece of VR hardware actually hit the consumer market several years ago. That was the *Mattel Power Glove* for the **Nintendo Entertainment System**. The *Power Glove* is really a simple and cheap version of a standard VR data glove. By wearing it a gamer could control a virtual reproduction of his or her hand that appeared inside a gaming environment. In *Super Glove Ball*, players used their virtual hand to play a video version of handball, but with the right software they could have used it for just about anything, from attacking virtual monsters with a sword to turning the pages of a virtual instruction manual.

Chris Gentile at **Abrams/Gentile Entertainment** helped design the Power Glove, and he said his company is working on a home VR unit, though he wouldn't release any details. Gentile said the only thing preventing the introduction of VR systems into the consumer market is a cheap pair of goggles with good resolution.



While many in the industry are shooting for something with VGA capabilities, Gentile said displays of fantastic quality are currently being developed. "The amazing part is the new display technology that will be able to handle TV resolution and greater." If Gentile is correct, VR goggles might become the backbone of a system rather than its weakest component. Since they're also one of the most expensive pieces of equipment, Gentile said consumers wouldn't have to spend money on costly upgrades, and that could be an important marketing consideration. "The computing power and chip form will probably not be able to match the display. I think that's what you have to do."

Another company which has been in on VR almost from the beginning is the **Sense8** Corporation. Co-founder Eric Gullichsen thinks an affordable pair of goggles is just around the corner, though they might not be developed for VR at first. "I would expect that the first video glasses will come as a result of a portable, video multimedia player,'' Gullichsen said. "The idea is, imagine a *Sony Walkman* or *Sony Discman*. Neat and simple. The parts are almost to the point that mass scale manufacture would make sense." The rest of the technology necessary for a home VR unit already exists, he added. "In terms of the rest of the components, cheap software, cheap graphics processors, that's there already."

Visions of Reality, a company working with **Sense8** to develop a game system, already has a prototype VR arcade unit which it expects to release in March of 1993. President Dan Rice said that while his company has no immediate plans to bring out a home VR system, there is one in the works. Rice said several companies are working on home systems and something like an immersive NES might be available in the next year or two. "In a full virtual world, 3-D, interactive, everything, I think in December or January of '94 or '95. It'll do what a workstation will do right now. You'll be inside the world, flying airplanes or playing interactive games where you can have four to five players in one game." He said the cost of those units would range between $500 and $1,000, though the price would drop rapidly.

Another group that isn't talking about what it's developing is **Sphere, Inc.** That company includes **Spectrum HoloByte** which is already working with **W Industries** to produce software for the *Virtuality* units. A. J. Redmer, the executive director for research and development at Sphere, said they were working on something relating to VR and the home market, but non-disclo-

sure prevented him from saying more. "I can't publicly state the stuff we're doing for home. There's a few systems we'll probably be supplying software for." He did add several companies to the growing list of those entering the VR field, including Walt Disney, General Cinema and MCA. Redmer said a lot of people were working on a variety of VR applications, including home units. "There's some really good stuff coming. Things are only going to get better and cheaper." Redmer also said that there are plans to upgrade the LCD goggles and new software is already in the works, but consumers might not see a change for some time.

Silence and non-disclosure agreements seem to pervade the VR industry right now and, with sales projected in the billions of dollars, companies are being understandably quiet. John Barlow writes about the VR field and he's familiar with many of its key players. He said that while a lot of companies aren't *talking*, they are *working* behind the scenes to produce an affordable home VR unit. "On the basis of the rumors that I hear and what I gathered by various methods of triangulation, I think you're going to see a pretty low resolution system available for general public use at an affordable price in the next year and a half. I think they're going to be like *Power Glove* class in terms of the resolution and in terms of the sense of reality that's being conveyed. I think it's going to be real rugged. We're talking under $500, but not much."

Barlow handily summed up what people actually know about what's being developed in the VR field. "Them that know aren't saying, and them that don't know, don't know." So far, there's only one yardstick to measure any VR game against, and that's *Virtuality*. When **W Industries** brought out its units in, first in the United Kingdom, then the United States, it caught the VR industry unaware. Although the cost of *Virtuality* appears healthy, it provides all the necessary hallmarks of a fully immersive system at what, to many, is a cheap price. The main complaint about that system has so far been its lack of resolution and software support.

However, there's been some indication that graphics are not the biggest consideration in creating a VR system. While *Virtuality* has admittedly crude graphics, it does give a sense to players



that they're in another reality when they're playing the game. "That's a pretty darn successful thing without being a big bit spitter," Barlow said. "Something like a 3D NES would do an adequate job for VR gamers, and right now a lot of companies would rather produce a low resolution system, if it would keep costs down. Even today's arcade and console systems lacking superb graphics do well in the market. If you take something like the video games that are out there, in terms of the actual number of polygons that are hitting the screen at any given moment, it's not that many. You're not talking about that many polygons per second. You're not talking about a very fast frame rate. It's more a matter of trying to optimize perception.

LEEP, a company that manufactures VR optics, said the number of pixels in a system like *Virtuality* is not a limitation. **LEEP** has created an anamorphic pair of goggles that provides higher resolution with smaller pixels. Greg Rivera, who handles marketing for LEEP, said it's been able to produce cheaper goggles with better resolution than other companies in the VR field without drastically increasing the pixel count. He said his company is working on a game system that's almost ready to be introduced. "It's only a system for the gaming market. We're very close. Maybe even within the next six months. It's just a new way of looking at VR gaming." As usual, Rivera could not release specifics about what LEEP was working on and he did not say whether it was for the home or arcade market. "We can't talk specifically about games we're doing now."

Since VR seems like it will be a major step in the evolution of both gaming and entertainment, companies are trying to approach the market cautiously, but quickly. Since it's a new medium altogether, VR games are being designed that will try to take advantage of all the technology's aspects even though they're not fully understood yet. VR should not be a case where the first in the market wins the market. Rather, the chance to provide a standardization for the industry would create an environment where quality is more important in the long run than timing. CGW

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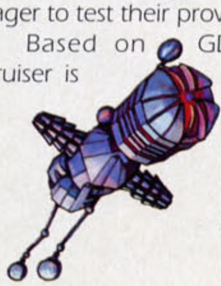
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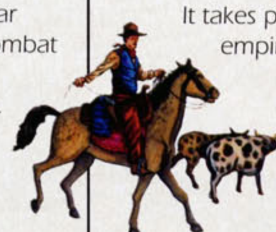
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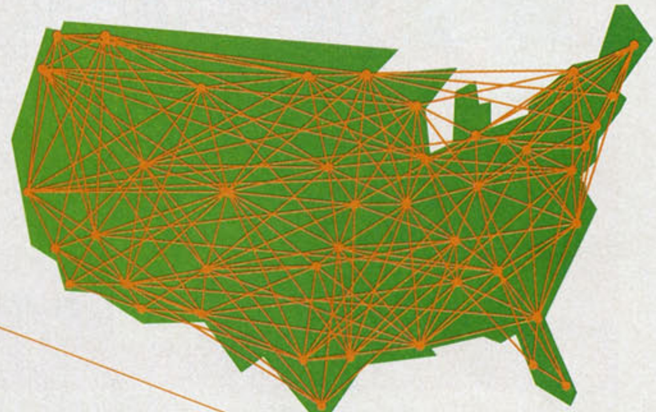
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It's Hip To Be Square

Blockheads Are Back In Style With Tetris Classic

by Michael S. Lasky

The story of *Tetris Classic* is exactly the opposite of Coca-Cola Classic. You remember the brilliant Coke marketing strategy. They changed the formula and the entire country turned up its nose at it. With much high fructose corn syrup on their face, the Coke people said, "all right, we will bring back the original Coca-Cola" and they called it Coca-Cola Classic. The New Coke all but faded away.

Well *Tetris*, the first Russian computer game brought to the U.S. as part of detante by **Spectrum HoloByte**, has been a raging success from day one. And now with more than 400,000 copies sold, four imaginative sequels, tens of thousands of pirated copies and a vast parade of me-too-ware, *Tetris* returns, ever the winner as a "Classic." It's like an old friend with a beauty make-over. As much as you liked and were comfortable with the old version, you have to admit the new one really is better. And *Tetris Classic* is just that: much improved, and still a joy to play. And still a habit hard to break.

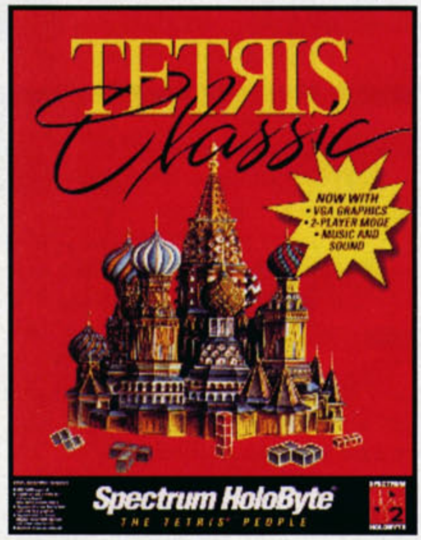
Tetris has remained a continuous bestseller since its first release in 1988. A testament to this success is Spectrum HoloByte's almost religious production of an annual spin-off game. First, in 1989, came *Welltris*, the fiendishly difficult 3-D version of *Tetris*. Following on its heels was *Faces*, which could have been called egg-on-our-Faces for all the expected sales that didn't happen. Up next was the 1991 *WordTris*, a clever crossword-like version where single letters instead of block clusters had to be assembled into words. *WordTris* made a nice splash and sold handsomely. Then, later in 1991, came *SuperTetris* which combined the best of *Tetris* and added a dazzling array of bells and whistles, music, VGA graphics and, in addition to the block clusters falling from the sky, a treasure trove of surprises arising from a bottom pit.

TITLE:	Tetris Classic
PLAYERS:	1 - 2 (on Novell network/hull connect)
SYSTEM:	IBM
PROTECTION:	Documentation Look-up
PRICE:	$49.95
DESIGNERS:	Rebecca Ang & Heather Mace
PUBLISHER:	Spectrum HoloByte Alameda, CA

What all these sequels did, especially *SuperTetris*, was to reveal just how simple, and in computer terms, how primitive a game *Tetris* is. Designed for computers that ran at a fraction of the speed of today's sleek PCs and Macs, and with only clunky graphic capabilities, *Tetris* seemed like Fred Flintstone, fun to have around but still prehistoric.

Clearly the time was right for an updated, spruced up version of *Tetris*. And so it was done. The first version has been removed from the shelves, although for diehards with equipment that does not support EGA or better graphics, there are still plenty of copies in retail inventory. For the rest of us, the new *Tetris Classic* is like the compact disc version of a favorite record — in with the digital, out with the scratchy analog.

Still richly redolent of its Russian heritage, *Tetris Classic* is now high-powered with 256-color VGA graphic tableaus, Russian folk melodies at the start of each round, and expanded play action to allow for pairs of gamers to play competitively, cooperatively, or head-to-head via a null modem connection or network setup.



One of the major complaints about the original game was that the actual playing field was a cramped inset screen in the middle of an entire screen occupied by busy background graphics. The playing field is now expanded and in the "comrade" two-player mode it is further enlarged from ten blocks wide to 16.

It may have been a while since some gamers have played *Tetris* (although that's hard to imagine) so here's a recap of how *Tetris* works: blocks fall from the top into the playing pit 20 squares deep and ten wide. The object is to arrange the block in a single completed horizontal line. When completed, the line disappears and points are earned. The problem with making the lines is

that the blocks come in four different geometric formations (L-shaped, straight line, cubed, S-shaped.) and arranging them to fall neatly into place takes practice and a gift for spatial logic.

Tetris Classic has improved on the actual game mechanics so that mastery is more easily attained, while making scoring more difficult. You can use a joystick, mouse or the keyboard cursor keys to maneuver the falling shapes. Keyboard keys seem to offer the precision necessary for accurate block movement. The spacebar releases the falling cluster quickly. Previously, once a gamer launched a quick drop, that was it — all control was lost. Now the drop can be manipulated; once you release the spacebar the shapes return to their normal velocity and can then be manipulated further.



Much of *Tetris Classic* can be user customized. The delightful background graphics become transparent in the playing pit area but they can be removed for those that like a totally black playing field. A timer has been mercifully added for those *Tetris* addicts who need to have their playing time restricted.

In the competitive levels of the game, a "Send Rocks" option will send extra random pieces to the bottom of the opponents field each time you complete two lines. And we thought the Cold War was over. The competitive rounds in *Tetris Classic* are a nasty bit of business.

The logistics of play are cleaner with the addition of a drop down menu bar, accessible with a touch of the Escape key. The copy protection scheme is now user friendly: the player is sent to the documentation only on the first play after installing the game. After that, password protection is removed. *Tetris Classic* supports all major sound boards, although it will only work with Sound Blaster cards that are at their default hardware settings. The Ad Lib board setting can be substituted.



The enhancements to *Tetris* are all basically cosmetic. The game remains the same: it is addictive because it is intuitively simple. Even though the improvements mean gamers now have 26 pages of documentation to read, it is still simple. Deceptively simple. And bound to be around as long as computer games are played. CGW

Continued from page 78

these instruments, sometimes I need one that is not in the internal bank. Another of the games I'm currently working on is called *Ringworld* (**Tsunami Media**). The game is based on a popular award-winning series of science fiction paperbacks by the same name authored by Larry Niven. *Ringworld*, as described in the novels, is a constructed world that resembles the shape of a Christmas ribbon connected at both ends to form a circle, whose actual size has a radius measuring 95 million miles and contains the area equivalent to a million earth-sized planets. That's one big piece of real estate!

The fact that the Ringworld is a constructed (synthetic) "planet" is important in the way I envisioned the soundtrack. I needed instruments that were synthetic sounding; I wanted a Wendy Carlos or Iso Tomita sound and the MT-32 has very few of these instruments. So, in addition to composing , I created customized instruments, instruments that have never been heard on the MT-32 before, using synth editing-software (*MIDI Quest* - **Sound Quest Inc**). This software allows me to create customized instruments and sound effects (like explosions, turbo powered tricycles, and hydraulically cushioned bungie cords, as well). Of course, 2-operator and 4-operator FM sound cards will have their respective set of customized sounds (using similar editing software) for the game soundtrack, too! My intent is to provide a fresh sounding score on existing equipment.

Virtual Reality For The Ears

The digitized sound effects and speech that you may hear from a Sound Blaster card are created using a digital recording of a software/hardware setup. To record the sound, I use a regular sampling keyboard. After the sound has been sampled, the digital information that makes up the sound is transferred to my PC via MIDI and sample editing software (*Sample Vision* - **Turtle Beach Systems**). From *Sample Vision*, I fine tune the sample and save it to disk; the end result: real recorded sounds in a computer game! For extensive amounts of digitized sound; for example: narration for CD-ROM, I use direct-to-hard-disk digital recording techniques. *Sound Stage* (also from **Turtle Beach Systems**) is a software/hardware package with stereo digital sound editing software, a PC card and an interface box that connects to the "digital out" of a DAT recorder. The DAT recorder is also connected to a mixing board with a microphone. With this setup, I can record CD-quality sound (for speech, music and sound-effects). I haven't even mentioned some of the fancy stuff, yet, like 3-D sound.

Tomorrow Afternoon

That brings us full circle to something I mentioned earlier; CD-ROM. *The* major complaint of game manufacturers is storage media restrictions. Look at how many disks will be shipped with this year's releases. *Blue Force*, from **Tsunami Media** is projected to ship on 12 high density (1.44M) floppies; other games on even more because of digitized speech support. The material cost for a CD-ROM is between $1 and $2.50 per CD, whereas the cost for twelve 1.44M disks is between $2.50 and $5 (your mileage may vary). Storage space on the CD-ROM is a phenomenal 660 Megabytes! That's enough room to support super VGA graphics, fully digitized speech, sound effects and a complete stereo soundtrack using one of the MPC certified sound cards. The potential for a complete interactive multimedia experience is at hand, and those of us who compose for this "multi" media are salivating at the prospects (and capabilities) of the CD-ROM/MPC marriage. When you play one of these games you will hear real orchestration and actual sound effects; a totally authentic soundtrack. And soon, the phrase "interactive cinema" will truly describe the gaming experience.

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CGW

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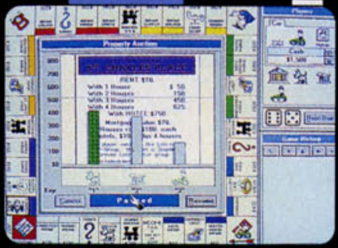
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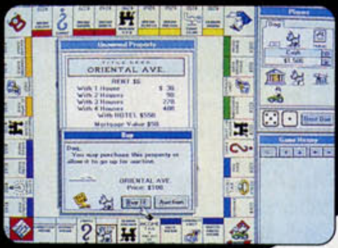
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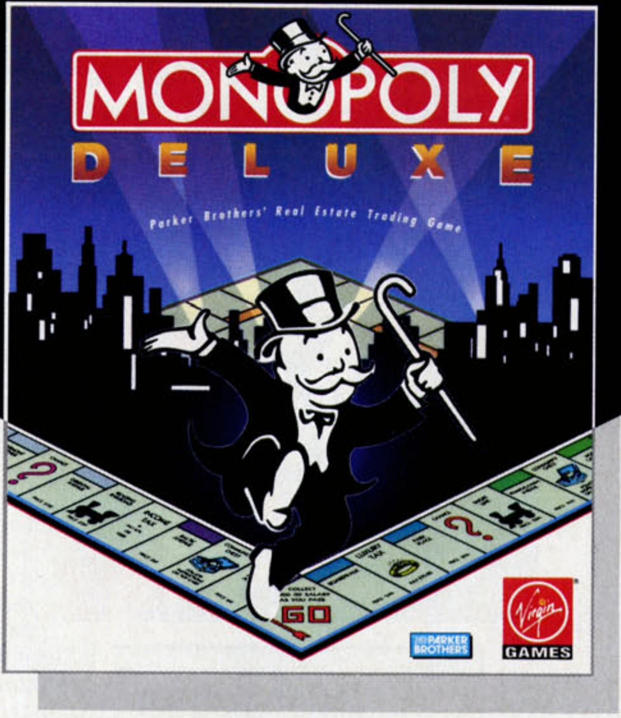
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IBM PC version



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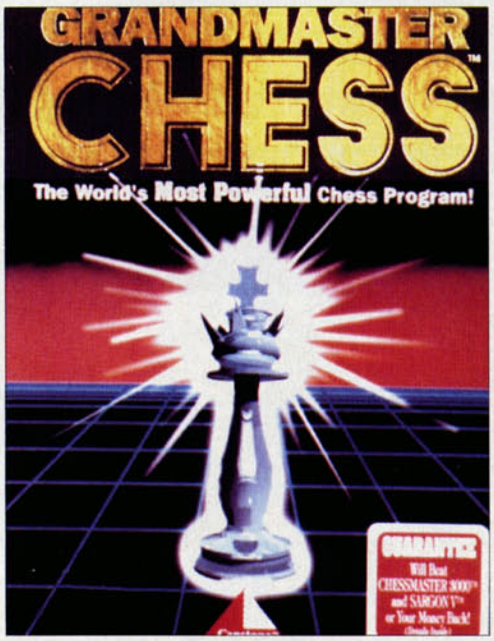
It Hap(Pawned) One Knight

Castling With Capstone's

GRANDMASTER CHESS

By Tim Carter

GrandMaster Chess is **Capstone Software**'s first foray into the field of computer chess games. Given the nature of the market in electronic chess simulations, any new product will face stiff competition from well-established games currently in their fourth or fifth generation. While *GrandMaster Chess* does provide the basic functions necessary to a chess game, it falls short of the current competition in terms of over-all options.



TITLE:	GrandMaster Chess
SYSTEM:	IBM 286, 386, 486
PLAYERS:	1-2
PRICE	$59.95
PROTECTION:	Documentation Look-up
DESIGNER:	John Stanbach
PUBLISHER:	Capstone Software Miami, FL

GrandMaster Chess uses pull-down menus to provide easy access to all of the available options. Using a mouse, the game flows smoothly and easily. Most of the options that are standard features on other recent chess programs are available on *GrandMaster Chess*. Variable piece styles, 2-D and 3-D perspectives, the ability to upload and download games, etc.

GrandMaster Chess also supports a number of sound options, including speech. Even using a PC speaker the program will occasionally make a comment. ("Bad move!" was the one I heard most frequently.) Copy protection takes the form of a code sheet from which players are required to enter an appropriate character before gaining access to the game itself.

The game's packaging states that it requires 640K to run and I can testify that it uses most of it. While I did not experience difficulties with a 386 using DOS 5.0 and extended memory, I was unable to run the title page on a 286 with DOS 4.1. Other users have reported being unable to even install the program on a 286, although I did not find this a problem myself.

The strength of the computer opponent is handled through a variety of options. There are five levels of difficulty ranging from novice to expert. Within each level it is possible to improve or weaken the computer by adjusting the time it thinks, giving it the option to think while you do, and by determining whether it will always pick the best possible move. A limited amount of personality can be added through the setting of three possible playing styles (passive, active or balanced).

This process is complicated somewhat by the lack of centralization with regard to AI options. Several of these options are located in different menus and there is no central organization to the characteristics of the computer opponent. In part, this is compensated for by the documentation. The manual is concise, easy to read and, with a few notable exceptions, reasonably comprehensive.

In addition, the computer has a limited ability to learn from its mistakes. It does this by saving any situation where the score changes against it. It will then recognize this situation as a losing one before it happens and take steps to avoid it, if it occurs in another game. With the exception of the tutorial function, however, the manual does not adequately address the nature of the computer intelligence. I would have appreciated a more lengthy explanation of the computer's method of analysis. A side window can be called up to show how the computer is thinking and what moves it is considering. However, even on my 386-16, the information in this window moved too fast to be of much use. Furthermore, the description of the information presented in the analysis window is somewhat lacking. Sequences of moves are analyzed and rated numerically on the basis of pieces lost and taken. Given the subtleties of chess strategy, this seems a bit shallow.

The problem is that all that is displayed is the tactical element of the game. Strategy and how it is being pursued is neglected. This is a difficult issue, since it is much easier to

provide an understanding of tactics than strategy, and invariably computer opponents are stronger tactically than they are strategically. However, the lack of strategic analysis weakens several of the features available. For instance, it is possible to ask the computer for advice at any point in a game. From a tactical viewpoint, this advice is not bad and can be useful for getting out of a tough spot once in a while. Yet, the computer does not provide the player with an understanding of *why* it thinks a particular move is good. Often it will run counter to the overall strategy that one has been developing over a sequence of moves. This can be disturbing when the advice is based solely on a short-term tactical evaluation of the current position.



While weak analysis is a drawback, a more serious problem is that certain features simply do not exist. *GrandMaster Chess* advertises a teaching mode, however neither the manual nor the pull down menus provide any hints as to where this feature resides. There is a similar problem with the library of opening moves. While this library exists, it is neither extensive nor particularly user friendly. There is no systematic overview of openings (or variants), or any useful way of learning particular openings or the relationship between openings and strategy. If one cares to enter openings into the library, the computer can analyze them, but once again this analysis is based on tactical rather than strategic factors.

There is a class of chess players out there whose strategic skill allows them to defeat the tactical strength of a computer opponent at any level of difficulty. This author is definitely not one of these people. For the rest of us (normal?) players, a good chess program must be able to provide at least some tools through which it is possible to develop one's skills and improve one's playing ability.

GrandMaster Chess is quite simply lacking in this area. It has all the "bells and whistles" that one might expect from a state of the art product, as well as the ability to play a reasonable game of chess with the minimum of fuss and difficulty. However, in comparison with the leaders in the field, *Chessmaster 3100* and *Sargon V*, some other (unnamed) products currently on the market, *GrandMaster Chess* comes up short. Those who do not care about real and useful opening moves libraries or teaching and analysis modes will find *GrandMaster Chess* enjoyable and, most likely, challenging. Those who do desire a more comprehensive package of options will want to shop elsewhere. CGW

Circle Reader Service #51

Circle Reader Service #60



Over There

European Games Summed-Up In One Word (Titles)

by Robin Mathews



Flashback

Pushover, from the Manchester, England-based company **Ocean,** is an original arcade/strategy game taking some inspiration from the excellent *Lemmings* products from **Psygnosis**. The gameplay is based on the massive layouts of dominoes, where the player "pushes over" one and sets off a chain reaction demolishing acres of dominoes in intricate shapes.

Pushover is not as complicated as *Lemmings*, but follows a similar design philosophy. The scene is set with a character called Colin Curly who loses a packet of savory snacks which end up disappearing down an ant hill, whereupon his old buddy GI Ant appears. GI is, of course, a soldier ant, possessed of super human strength, and small enough to enter the anthill. He volunteers to recover the snacks.

All is not as it seems, however, as this is no ordinary anthill. Rather, it is the entrance to the amazing world of Domino Domain. This is a mini world comprised of nine different continents, each with a multitude of different levels. To get from one level to the next one must open up a door; achieved by knocking over every tile, with the trigger tile being last. Sounds easy, but as the tiles are split over several levels and special tiles (including tumbler tiles, ascender tiles, bridger tiles, delay, splitters, vanishers, exploders and stoppers), one can wind up in a terrible tactical tangle. As screens are completed, the player is awarded tokens which can be used to negate the time limit or to return to an uncompleted level. EGA, VGA and MCGA graphics are supported, the VGA screens being particularly crisp. The game controls are very positive, especially with the supported joystick, and the sound support is well up to scratch. This has all the makings of a winner; the strategy element is very high, and *Pushover* is anything but its title. Be warned it is very, very addictive!

Latest news from the stylish French company **Delphine** is the forthcoming release of *Flashback*, hot on the heels of their graphic adventures *Operation Stealth*, *Cruise for a Corpse* and the interesting, *Another World [Ed:* Out of This World *in the U.S.]*. This release uses the famous cinema techniques of flashbacks to present its story and revolves around Conrad B. Hunt, a research scientist who discovers that certain individuals have a molecular density much higher than anyone else. These people are in fact, aliens, and they hold most of the top jobs in the world. Conrad's investigations were noticed by the ET's who kidnapped him, erased his memory, and locked him up in a top security prison from which there is no escape.

Conrad escapes (!), steals a hoverbike and flies off into the — ah, this seems to be the planet Titan. Then, Conrad starts to have occasional flashbacks which unravel the storyline. The graphics are very impressive and the animation is superb. The main character is able to walk, run, jump, climb, roll, duck, inch forward (*a la Prince of Persia*), pick up objects and throw them. The graphic system is, in fact, a development of that found in *Another World*, and now uses 24 animation frames per second to produce some very smooth and realistic movement.

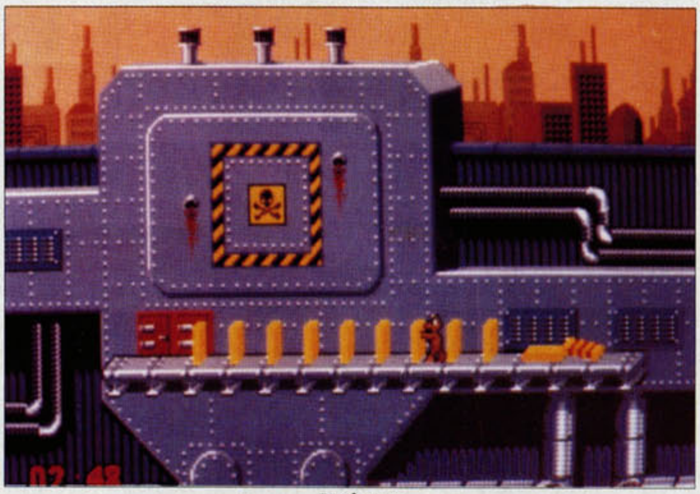
Throw in the elements of role playing and adventure and this may avoid some of the criticisms of **Delphine** products of being a touch too Gallic! Currently being converted from the French version, this should be released late in the year.



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The most successful role playing series in Germany is *Das Schwarze Auge*— it apparently outsells *D&D* and *AD&D* by approximately four to one. **Attic Software** of Germany has recently announced that they will be releasing the first English language version under the title, *Blade of Destiny*, with the series to be known as *Realms of Arcadia* and available on IBM and Amiga. The computer versions will closely follow their pen and paper ancestors, making for a very detailed game system. Character development is a huge area with over 100 skills, and also 'negative' attributes like greed, superstition and phobias. Add in over 200 spells and it is apparent that this is no lightweight. UK and French distribution will be handled through the UK distributor **U.S. Gold**. U.S. distribution yet to be announced.

Turcan Research Systems, has released two add-on disks for their well received surface fleet battle simulator *Dreadnoughts*. The first is *Ironclads* and covers a period prior to the original product, in the Sino-Japanese War of 1894, and the Russo-Japanese War of 1904/5. The first war is represented by the Battle of Yalu, 17th September 1894. The second conflict is covered by the Battle of The Yellow Sea, 10th August 1904, the Battle of Ulsan, 14th August 1904, and the Battle of Tsushima, 27th May 1905. The ships and combat are markedly different from the World War I period. At Yalu, for example, the biggest Japanese guns could fire only once every five minutes! A neglected period of naval history is admirably covered by this idiosyncratic gaming system. The add-on disk captures the era well, and is a much more leisurely affair than the chaos of Jutland.



Pushover

The second scenario disk is probably the most interesting of all. *Bismarck* covers major 'surface only' naval clashes during World War Two. The first is the Battle of the River Plate and the sinking of the Graf Spee. There are also three scenarios involving the pursuit of the pride of the Kriegsmarine, the KMS Bismarck, including the clash with HMS Hood and Prince of Wales, and her final battle. The packed disk also includes the Battle of the Java Sea that involves the ABDA force in the Far East, including the USS Houston, and finally, the Battle of North Cape: The Sinking of the Scarnhorst.

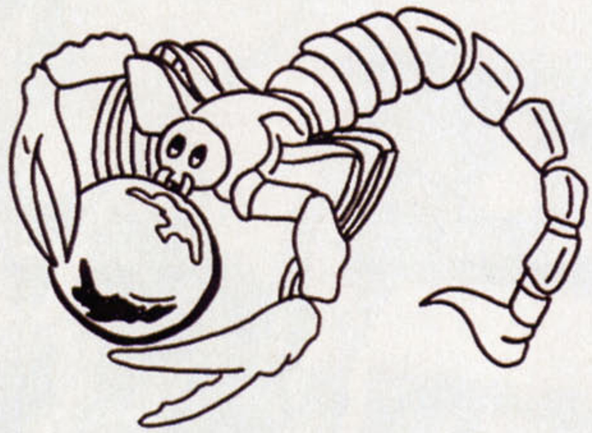
Each of these scenarios can be played from either side, and also with lots of 'what ifs' so you may be able to get the Bismarck back to port, or sink all the allied cruisers off the River Plate. Superb graphics, and enormous research make these two 'mission' disks a welcome addition to *Dreadnoughts*. The game is essential for old sea-dogs, and if the interface was just souped up a touch, *Dreadnoughts* might appeal to a much wider audience. CGW


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Dungeon Master

Scorpia Takes a Look At a (too) Long Awaited Conversion

as told by Scorpia.



Scorpia is an experienced and respected adventure game expert. CGW is pleased to provide this forum for her distinctive and often controversial prespective.

Almost six years ago, *Dungeon Master* arrived on the CRPG scene, appearing first on the Atari platform. It was hailed almost immediately as innovative and state-of-the-art. Its very name became descriptive of a particular style of dungeon. Eventually, the game made its way to the Amiga, the Apple IIGS, and now at last, to the IBM.

The big question is: did **FTL** take too long to bring it to the IBM market? Can a game hailed as innovative almost six years ago still hold its own against state-of-the-art productions such as *Eye of the Beholder* and *Ultima Underworld*? Or is *Dungeon Master* now a mere curiosity, a groundbreaker whose time has long passed?

Visually, many games have surpassed *Dungeon Master*, and given the rapid advances in technology, this isn't surprising. For all that, the graphics are surprisingly good, all things considered. True, each dungeon level is composed of the same gray stone blocks, which can become monotonous after a while. Even so, the various monsters are well-detailed and well-conceived, acceptable at even today's high standards.



Beyond pretty pictures is the game itself. *Dungeon Master* never made any pretensions to being other than what it is: a dungeon crawl through fourteen levels of increasing nastiness, with an equally-nasty endgame (we will get to that in due time).

There is, of course, a bare bones plot to provide the motivation for trekking through this hostile environment, but essentially it's a hack'n'slash epic sprinkled throughout with a number of devious puzzles to keep you mentally alert and give you something else to do besides bash monsters.

Anyone who has played *Eye of the Beholder* (either or both) will find much here that is familiar. This is especially true of the combat style, which relies most of the time on the "slip'n'slide" method of hitting an opponent, then moving quickly away to the left or right (or, occasionally, backwards).

Fighting tends to be slower than in *EOB*, however, since each time you click on a weapon, a small menu comes up from which you must choose the character's attack mode: chop, swing, thrust, melee, berserk, parry, etc. This is true even for weapons such as slings or bows, which have only one attack possibility, namely "shoot."

The screen layout is also somewhat awkward. Character portraits are lined up along the top left of the screen, in the order you chose your party in the Hall of Champions. The top right cor-



ner has a 2 x 2 diagram showing their actual positions, and lower down is a row of symbols, displaying what each member has in his fighting hand. It is these symbols you click on during combat to fight or use a magic item.

The problem is that neither the symbols nor the portraits change position if you make changes in the party order. Only the 2 x 2 diagram reflects the actual arrangement of characters. This can be confusing, particularly at the start. You can also waste spells by not remembering where everyone is, as many offensive spells go off on the same side as the caster. A fireball or lightning bolt might zip harmlessly down the passage into a wall instead of into a monster if you aren't careful.

One aspect of combat did not make the transition to *EOB*: door-bashing a critter. This tactic involves luring a monster into a doorway, then pushing the button to shut the door. Depending on how smart/fast the critter is, it will take one or more hits from the door before retreating. It is a handy "extra fighter" in many situations.

Magic is handled in a style somewhat similar to the system used in *Ultima Underworld*. Spells are prepared beforehand for each character capable of magic, using an array of symbols for each spell. Thus, the party can have up to four "ready" spells that can be cast immediately when needed, instead of fumbling through magic books.

However, once a spell is cast, another set of symbols must be put together before that character can cast another spell (either the same one or a different one). Since combat is real-time, this generally means each character can only get off one spell per fight, as there is usually no way to put symbols together while maneuvering around giant scorpions or bloodthirsty rats. Thus, spellcasting is of generally minor use in combat, although several powerful spells going off one after the other can be effective.

Advancement in any class is solely "by doing", a radical departure from the "gather enough experience points to go up a level" system used by almost all CRPGs, and much more sensible. Wizards and priests gain levels only by casting spells. Fighters, naturally, get better the more they fight and ninjas improve by using missile weapons.

A nice feature here is that, whatever a character started as, he or she can become multi-classed by practicing other skills. Someone who is "only" a fighter, for instance, can try casting some low-level mage spells, and eventually begin gaining levels as a wizard (or priest, by trying priest spells).

Food and water are very important, and unlike *EOB* and *UW*, there is no food creation spell. You must depend on finding edibles scattered around the dungeon or eating the remains of some of your opponents, such as the rats, purple worms, and screamers. This also means you have to clutter your inventory and weigh your characters down with extra food, since it is scarce on several dungeon levels.



Puzzles tend to fall into one of several types: finding the hidden button, weighing down plates, throwing things into teleporters to weigh down plates, avoiding teleporter fields (visible or invisible), dancing around pits, and so on. Anyone who has played *EOB* will find these quite familiar, and will have an advantage over someone who hasn't played it before.

That doesn't necessarily mean the puzzles are easy to solve. Some, such as the clockwise/counterclockwise rooms on level 11, can be rather devious. So it pays to explore thoroughly and experiment carefully.

Which brings us to saving the game. This can be done at any time, even in the midst of combat (not recommended). Unfortunately, there is only one save position allowed. This can mean trouble if you happen to save the game with your party in a bad spot, or if you happen to have a crash of some sort and lose the save file. Wise players will therefore exit the game now and then to back up the save and have something to go back to in case of difficulties.

Even more unfortunately, there is no way to reload the save from inside the game, except when everyone dies. To restore a position otherwise, it is necessary to exit and reboot the game. This is very poor, and there is really no excuse for not having an in-game reload.

There is nothing much in the way of music, except for a little tune that plays at the doors of the dungeon at boot-up. However, there are plenty of sounds. Party members grunt in pain when hit, and scream collectively when falling through pits or when everyone dies. Buttons click when pushed, doors open with a clank, etc.

Naturally, the critters make noises, too. Each one has a sound it makes during attack, and they can often be heard walking/slithering/scuttling around before they actually show up in

the vicinity, if you take time to listen. What is perhaps the most astonishing achievement of *Dungeon Master* is its size. The entire game fits on a single, uncompressed, 5.25 high-density floppy. In these days of megabyte monsters, it is amazing (and refreshing) to find one that takes up less than 2 MB of space…and that for a game which (aside from not having SVGA graphics) gives you almost everything you can get from *EOB*, with more dungeon levels besides.

However, there is a dark lining to every silver cloud, and the dark lining here is the endgame. Some people thought that spiking the Beholder or dealing with Dran Draggore was tough; those critters were a piece of cake compared to Lord Chaos and his demon buddies.

No endgame has ever given me so much trouble or frustration. As many know by this time, the showdown with Lord C is not so much a "Foozle fight" but a "Foozle trap," where he must be enclosed in fluxcages and rendered harmless rather than killed (it's not possible to kill him anyway).

Chaos by himself is more than enough for any party, but the six or eight demons that come with him make the situation almost impossible. When I tried ignoring the demons and concentrating on Lord C, the party was quickly surrounded and destroyed. When I tried killing the demons first, Chaos always popped in behind the party and blew them away in short order, no matter how fancy the footwork.

In the end, I got him more by luck than anything else. The bones of Alex, Nabi and Elijah were scattered across the dungeon floor, leaving only Duke Zed (my hero!) to do the job. After a considerable amount of time waltzing around with Lord C, I realized that only one demon was actually in this part of the room.

Where the others were, or why they didn't show up, is a mystery, as they usually came stumping along soon after Chaos made his appearance. Whatever the reason, it gave me the opportunity to finally finish the game. I blew away the single demon, then developed fluxcage mania.

They went up everywhere, whether Lord C was around or not. Almost half the southern end of the room was covered with them. They were so thick, I could barely see more than a step or two in front of me. Regardless, the tactic worked, and Chaos was finally contained…but again, only because no other demons were around.

I've gone on about this endgame because up to this point I was rather enjoying the game as a whole. *Dungeon Master*, for all that it creaks a bit, is still eminently worth playing, even years later. However, because the endgame is so difficult (needlessly so), I can't give it a blanket recommendation. Anyone who hates real-time combat, or had severe problems with the final fights in *EOB I* or *II*, may well give up in aggravated disgust when faced with Lord Chaos and company.

On the other hand, those who enjoy this style (and frustration, heh), are likely to find that the game that started it all still has something to offer the seasoned adventurer. CGW

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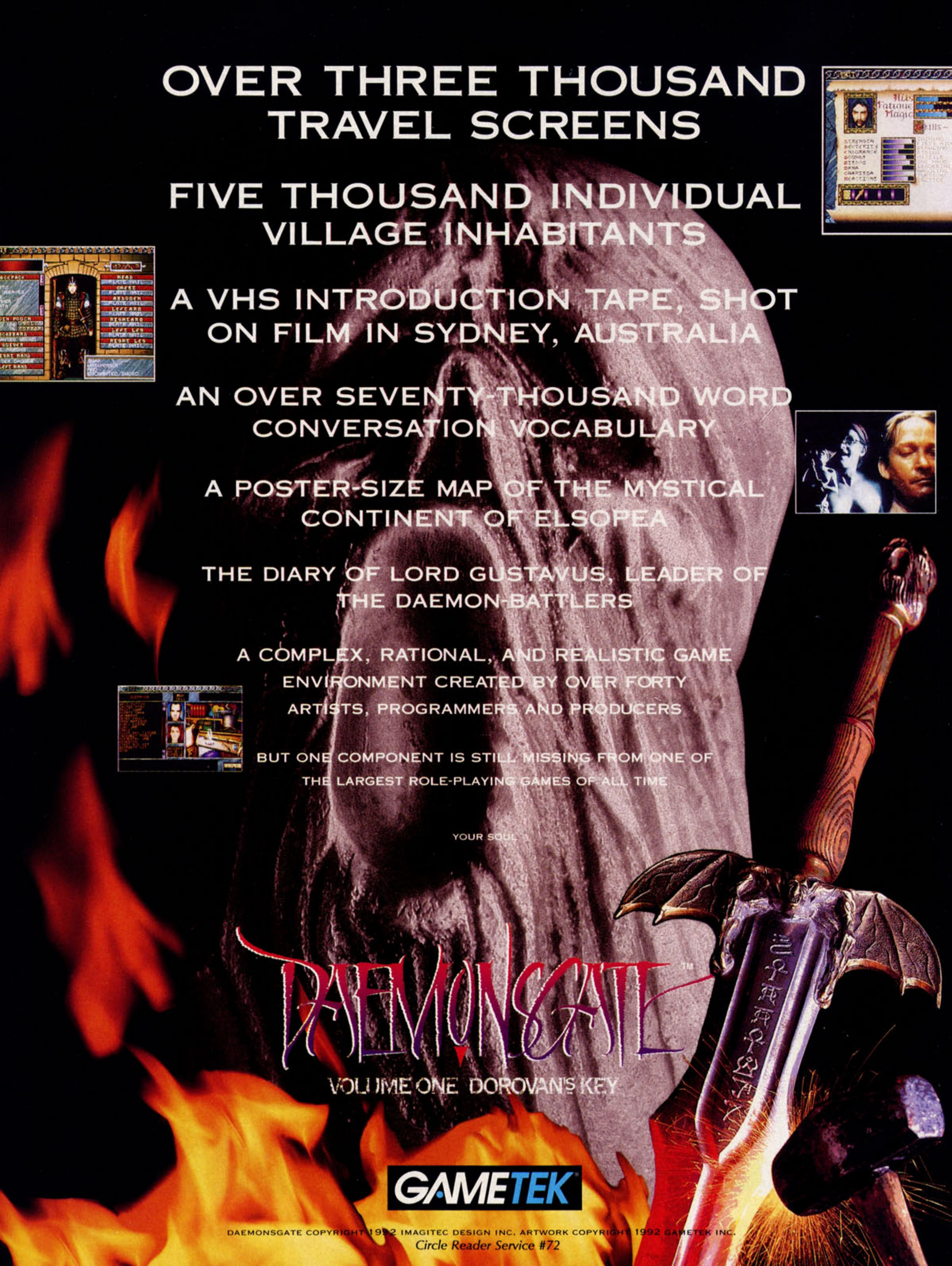
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Strategy & Wargames: The Future (2000-....)

A Paiktography of Past and Future Sci-Fi Games

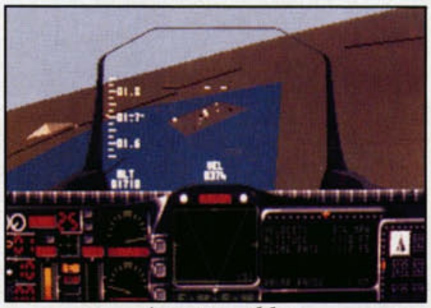
by M. Evan Brooks

This paiktography will cover the "futuristic" strategy and wargames released for the computer markets. The subject matter proved to be the most difficult to define because so many science fiction simulations are role-playing games or arcade "shoot-em-ups." Where a strategy game begins and a "shoot-em-up" or role-playing game ends is an unceasing problem of definition. I have tried to cover those simulations that emphasize the former aspects and do not rely on quick reflexes or intensive role-playing. Another problem is that futuristic simulations seem to "blend" into one another; after all, what is the basic difference in a game based on destroying Krellans or Kzinti or whatevers?

But aside from definitions, I have merged certain other simulations which would clearly belong to other periods — some fantasy simulations are covered (e.g. *DragonStrike*) simply because their topics do not easily lend themselves to another period.

Futuristic simulations must create their own environments. While a historical product has an underlying reality which assists in creating the "mood", the futuristic product must do so by itself without external reference. This often presents a problem — an attractive game today can grow obsolete faster than a historical simulation simply because it does not have the intrinsic linchpin of reality. Of course, this also allows the designer a great deal of latitude; how he handles his created world will determine how long-lived a product he develops.

The computer market is quick-changing and unforgiving, and the state-of-the-art changes rapidly. Futuristic simulations seem to be among the most short-lived of all games; simultaneously, they are also those that are often used for graphic innovations. It should be noted that the ratings are an individual preference, and do not necessarily reflect the opinions of the publisher or editor of this magazine. Also, please note the platform availability; a five-star game on an Atari 800 that is several years old is not of the same sophistication as a new product designed for a PC 486-33. However, it has been given its rating for what it did, to a lesser extent, what it still does, and



Armourgeddon

perhaps for the place it holds in this reviewer's heart and memory. Of course, the designers look askance at these ratings, and often deluge the magazine with voluminous complaints. But again, these are intrinsically subjective, and a discriminating reader should be able to temper the ratings with this writer's normal reviews in order to ascertain the inherent biases. What is also noteworthy is that few computer games have a shelf life longer than three years, yet board games remain classics ten years or more after their release (e.g. *Napoleon's Last Battles*, *A House Divided*, *Up Front*).

Prices are difficult to determine for older games, since they are so heavily discounted, assuming they can be found at all. Thus, be aware that the prices are only a rough guideline. Also, since this guide is for reference, one should be aware that prices shift downward rapidly.



Breach 2

If any readers have additions/corrections/modifications, please send them to me in care of this magazine or via modem on GEnie (address: M.E. Brooks). Special thanks to Craig K. Andrews for his extensive corrections to earlier paiktographies.

LEGEND:

LINE 1: TITLE

LINE 2: (Machine Format [(A)tari/(C)ommodore/(Ap)ple II/(T)RS-80/II(GS) /(Am)iga/(ST)/(M)acintosh /(I)BM]/(P)ET; Issue of CGW in which that game was mentioned (bold print refers to major article)]. [Company/Designer/Date of Publication/Price (O/P: Out of Print)/Rating
(0 = Good use as a magnet holder
* = Avoid
** = Marginal
*** = Average to Good
**** = Very Good
***** = Highly Recommended
N-R = Not Rated)]

LINE 3: Difficulty [(Beg)inner /(Int)ermediate/(Adv)anced]/Level [(Tac)tical/(Op)erational /(Str)ategic]* / # of Players (M: modem option)

No table of unit sizes has been presented because the scope of futuristic simulations ranges from man-to-man to galactic empires. Generally, a tactical simulation will range from a man-to-man to ship-to-ship; operational simulations cover squadrons to fleets; strategic simulations cover entire planets to complete universes.

xxx = Data not available.

THE ALIEN
(Ap; #**3.3**) Avalon Hill; H. van Halteren; 1983; O/P; N-R
Int/Tac/1

A computer version of the now-classic movie with Sigourney Weaver (though not to be confused with the movie-licensed arcade-style game from Activision), this product offered a number of scenarios and options in an attempt to "ethnically cleanse" your space vessel.

ANDROMEDA CONQUEST
(C/Ap/I; #**2.6**) Avalon Hill; David Peterson; 1982; O/P; **
Int/Str/1-4

This strategic game of economic management and planetary conquest was simpler than SSG's *Reach for the Stars* (which came later) and slightly tougher than Avalon Hill's *Galaxy*.

ARMADA 2525
(I; #**87**) Interstel; R.T. Smith; 1991; $49.95; ***+
Adv/St/1-6

Space colonization, research & development, production and galactic battles — it's all here in an ambitious package. Multi-layered and detailed.

ARMOUR-GEDDON
(Am/ST/I; #85,**87**) Psygnosis; Paul Hunter and Ed Scio; 1991; $49.99; **
Int/Tac/1-2

A simulation of aircraft, tanks and hovercraft attempting to destroy the "mad scientists" who will otherwise destroy the planet. In addition to combat elements, one must determine research and production priorities. With a heavier emphasis on tactical battles rather than cerebral considerations, it can be fun, but resembles a Chinese take-out restaurant, i.e. a half-hour later, you are hungry for something with some substance.

AUTODUEL
(Ap/C/M/Am/I; #26,**28**,29) Origin; Chuck Bueche; 1985; O/P; **
Int/Tac/1-2

A computer rendition of Steve Jackson's classic board game, this simulation panders to the harried commuter in us all. Arm your vehicle and destroy the opposition! Graphics and game play now appear very dated.

BATTLE ISLE
(Am/I; #89) UbiSoft; Blue Byte; 1991; $49.95; ***+
Int/Op/1-2

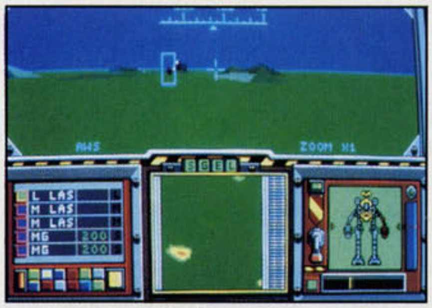
A true wargame, with a hex-based map in a futuristic conflict. Detailed air, ground and sea units compel one to adopt a comprehensive combined-arms strategy for victory. Enjoyable for the persistent gamer looking for new worlds to conquer.

BATTLETECH: THE CRESCENT HAWK'S REVENGE
(I; #76,**79**) Infocom; Barry Green and Tony Van; 1990; $49.95;***
Int/Tac/1

Set in the BattleTech universe, this is has strong role-playing elements, but still retains a tactical flavor of mechwarrior combat.

BATTLE TREK
(A; #**2.5**) Voyager; Chris Frazier; 1982; O/P; N-R
Beg/Tac/1

Ship-to-ship space combat, from the early days of computer gaming.



Mechwarrior

BERSERKER RAIDS
(A/Ap/C/I; #**5.3**) Berserker Works; Lloyd Johnson; 1983; O/P; N-R
Beg/Tac/1-2

A strategy game based on the Fred Saberhagen science fiction novels.

BREACH
(Am/ST/M/I; #41,**45**) Omnitrend; Tom Carbone & Bill Leslie; 1988; O/P; **
Int/Tac/1

Tactical man-to-man combat with space marines.

BREACH 2
(Am/ST/I; 65,68,**70**) Mindcraft; Tom Carbone; 1991; $49.95;****
Int/Tac/1

A newer revision, and one which fits into *Rules of Engagement* as a tactical subset thereof. Easy to learn and fun to play, it is reminiscent of SSI's *Six Gun Shoot-Out*, but moved from the Old West to Outer Space. A design-your-own scenario option and on-line availability of scenarios makes this a continuing "fresh" product.

BREACH 3
(I) Impressions; xxx; 1993(?); $69.95; N-R
Int/Tac/1

The latest rendition of *Breach* is expected to have a campaign builder, as well as a scenario designer.

CARRIER COMMAND
(C/ST/M/I; #**52**) MicroPlay; Clare Edgely; 1988; $39.95; **
Int/Op/1

Carrier warfare in the 22nd century, to include air and sea options plus production and manufacturing of armaments. Although it combines arcade and strategy elements, it just never seemed to stand out from the crowd.

COMBOTS
(C; #74) Avalon Hill; John Huff; 1990; $19.95; **
Int/Tac/1

RobotJox without elan. Players design their own robots and scenarios, but the whole is less than the sum of its parts and the genre better fits a first-person perspective as in *MechWarrior* or *Multi-Player BattleTech.*

CONFLICT 2500
(A/Ap) Avalon Hill; xxx; 1982; O/P; N-R
Beg/Tac/1

A tactical simulation of space conflict in the 26th century.

CONQUERING WORLDS
(Ap; #**4.2**) Datamost; Walt Hochbrueckner; 1984; O/P; N-R
Beg/Str/1-3

A simple destroy the enemy civilization campaign. It was not original when released and time has done nothing to make it more attractive.

COSMIC BALANCE I-II
(A/Ap; #2.6,**3.1**,3.5,5.1) Strategic Simulations, Inc.; Paul Murray;1982/1983; O/P; ***
Int/Tac-Op-Str/1-2

Two early SSI releases, the original *Cosmic Balance* offered an individual ship-to-ship battle in space (with design-your-own-ship capabilities), while *Cosmic Balance II* covers more of the planetary and galactic overviews (together with aspects of economics, colonization and exploration on a macro-scale). Both were excellent products in their day; note the operative words — "in their day."

CYBER EMPIRES
(Am/I) Strategic Simulations, Inc.; Dennis Dyack, Rick Goerts; 1992; $49.95; N-R
Int/Tac/1

Players build teams of mechanoid fighters in the far future and resolve arena-style battles via action sequences in this adaptation of the popular European boardgame, *Steel Empires.*

CYTRON MASTERS
(A/Ap; #**2.5,2.6**) Strategic Simulations, Inc.; Dan Bunten; 1982; O/P; **
Int/Tac/1-2

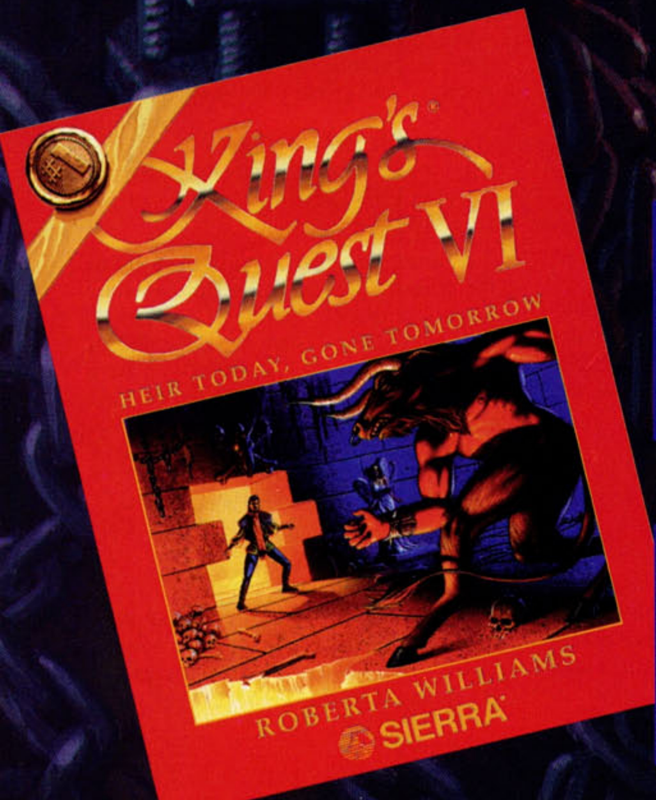
Combined arms tactics utilized in real-time combat in a futuristic milieu. Players control robot warriors which strive for control of foreign planets.

DEBUT
(Am/ST; #76) Pandora; xxx; xxx; xxx; N-R
Adv/Str/1

A European hybrid: *SimEarth* meets *Balance of the Planet*.

DELTA SQUADRON
(Ap; #3.5) Nexa; Gilman Louie;

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1983; O/P; N-R
Int/Tac/1

A tactical simulation in which the player must duplicate the Star Wars' destruction of the Death Star. The names and premise have been changed to avoid copyright infringement, but there is an obvious resemblance. There are nine "different" scenarios (in terms of strength), but the objective is the same in every case

DRAGONRIDERS OF PERN
(A; #4.3,**4.4**) Epyx; xxx; 1983; O/P; **
Int/Tac-Op/1-4

A strategy game based on Anne McCaffrey's classic space fantasy novels, this product combines tactical elements (thread fighting) and operational aspects (negotiations with other Weyrs). It offers some interesting features, but it is dated and primitive.

DRAGONSTRIKE
(C/Am/I; #**71**,**77**) Strategic Simulations, Inc.; Westwood Associates; 1990; $39.95/49.95; ****
Int/Tac/1

Although this product is set in an AD&D world, it appears to be an Anne McCaffrey clone of the *Dragonriders of Pern* genre. Jousting atop a dragon with different weapons systems (fireballs, gas, etc.) often resembles a World War I fighter duel. Sadly, this product did not receive the attention or play that it deserved.

ELITE
(C/Ap/Am/ST/I; #25) Firebird; Ian Bell and David Braben; 1986; O/P; **
Int/Tac/1

Interstellar trade and combat with two thousand planets in eight galaxies, Elite used wire frame graphics to depict space flight. Its popularity was largely a result of being one of the first space games with a "large" universe to explore.

ELITE PLUS
(I; #86) MicroPlay; Chris Sawyer; 1991; $49.95; **+
Int/Tac/1

An update of the original, with better graphics and sound (although they are still not up to state-of-the-art). More detailed and complex, it is also more tedious than the original.

E.O.S.
(C/Ap; #**40**) Electronic Arts; Karl Buiter; 1987; O/P; **+
Int/Tac/1-4

An interesting failure, *Earth Orbit Station* is a game of logistical space station building. Yes, amateurs think



Rules of Engagement

tactics and professionals think logistics; the problem is that, considering the clunky interface, the logistics just are not that much fun.

FEDERATION
(Am/ST; #70) Cinemaware; Paul Blythe; 1990; O/P; N-R
Int/Tac/1

A space ship flight simulator with good graphics and decent gameplay that simply doesn't stand out from the crowd.

FEDERATION II
(GEnie; #**97**) GEnie; Alan Lenton/Ken Farnen; $6 per hour; ***+
Beg/Tac/Unlimited; M

Economic/role-playing in the far future, *Federation II* requires players to determine the economic viability of trade runs, bounty hunting, tactical ship-to-ship battles and commodity arbitrage while building up the wealth, power and influence of one's character.

FIRETEAM 2200
(I; #81,82,99) SimSystems and RAW Entertainment; Dave Nielsen; $49.95; 1991; ***
Adv/Tac/1-2; M

Tactical ground combat in the 23rd century; a detailed and complex wargame, but one which could have benefitted from mouse implementation and a scenario builder.

FIRST EXPEDITION
(I; #**53**) Interstel; Steven Englestad; 1988; $49.95; *
Int/Tac/1

A slow-moving simulation of planetary exploration with elements of navigation, management and role-playing which doesn't decide which facet to emphasize and succeeds at none.

FULL METAL PLANET
(Am/I; #**80**) DataEast; Hitech Productions; 1991; $49.95; ***+
Int/Op/1-4

A tradititional hex-based military simulation (with economic underpinning) occurring on a mining planet. Well-balanced and fun to play, but it seems to lack a "joie de vivre."

GALACTIC ADVENTURES
(A/Ap; #**3.4**) Strategic Simulations, Inc.; Tom Reamy; 1983; O/P; ***
Int/Tac/1-2

Basically, a role-playing shell that expanded the horizons of *Galactic Gladiators*, the tactical sci-fi combat game described below, *Galactic Adventures* uses a first person perspective where one's character applies to one of four guilds for the necessary expertise to explore the galaxy.

GALACTIC ATTACK
(Ap,I; #**3.3**) Sir-Tech; Robert J. Woodhead; 1983; O/P; N-R
Beg/Op/1

An early real-time space battle game reminiscent of *Trek* games like *Star Fleet I,* but requiring one to think ahead because of the time restriction. Allows custom parameters to adjust difficulty rating. Compared to today's graphics and game play, it offers little.

GALACTIC FRONTIERS
(M; #**99**) SoftStream Int.; Russel Lowke; 1991; $59.95; **
Beg/Str/1-4

A strategic space conquest game of the *Reach For The Stars* ilk, *Galactic Frontiers* offers a venue in which two to four human players can compete for control of the galaxy. Offers an easy interface and a simple economic model.

GALACTIC GLADIATORS
(A/Ap; #2.5,**4.4**,**4.6**) Strategic Simulations, Inc.; Tom Reamy; 1982; O/P; **+
Int/Tac/1-2

A space combat simulation between different species types, it was one of the first "space operas" to offer a scenario designer. Very dated.

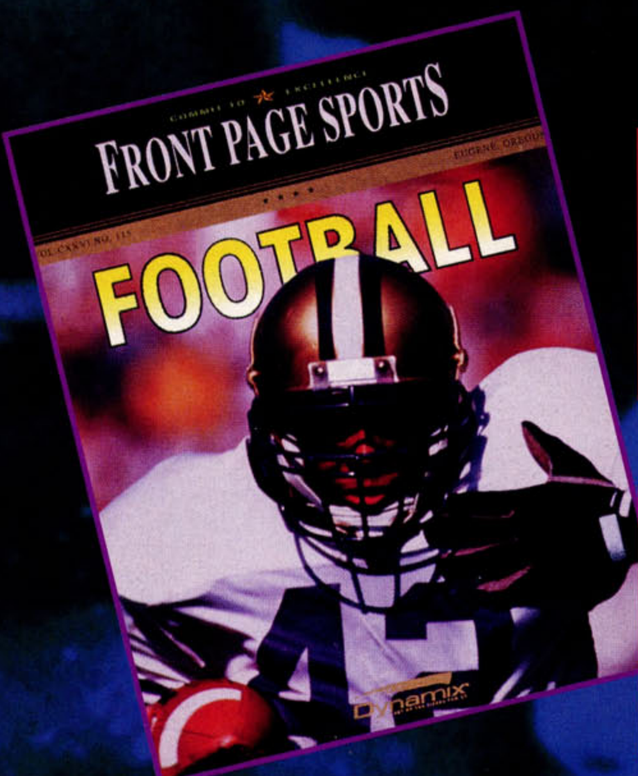
GALAXY
(A/Ap/I) Avalon Hill; Tom Cleaver; 19; O/P; **+
Beg/Str/1-20

Players attempt to conquer the galaxy with the victory going to the empire with the most planets at the end of either a preset or random number of turns. A simpler predecessor of *Reach For The Stars.*

GLOBAL CONQUEST
(I; #**93**,**97**,99) MicroPlay; Dan Bunten; 1992; $59.95; ****+
Adv/Op/1-4; M

The futuristic element is limited to combat operations on another planet,

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but this product's main strength is modem play coupled with detailed military operations. Recommended.

GLOBAL EFFECT
(Am/I; #**99**) EA/Millenium; Toby Simpson; 1992; $49.95; **
Int/Str/1-2; M

Economic/ecological warfare in the near future, the modemability is questionable as is the playability. The game is detailed but the documentation and interface make it very tedious.

HYPERSPEED
(I; #**92**) MicroProse; Sandy Peterson and Andy Hollis; 1991; $59.95;*+
Adv/Tac/1

An expanded *Lightspeed*; its strategic aspects are often overshadowed by role-playing elements. Emphasizes trade and diplomacy more than combat.

INFILTRATOR I-II
(C/Ap/I; #**44**) Mindscape; Chris Gay; 1987; O/P; *+
Int/Tac/1

A futuristic helicopter simulation, with emphasis on arcade aspects. Tongue-in-cheek documentation grows dated quickly, as does the program itself.

IMPERIUM
(Am/ST/I; #71,75,**80**) Electronic Arts; Matthew Stibbs and Nick Wilson; 1990; $49.95; ****
Adv/St/1

A very detailed simulation with military, economic and diplomatic aspects. Sadly, its graphics were mediocre and it seemed to quickly disappear from the market. Yet its rich texture and gameplay deserve a second look.

IMPERIUM GALACTUM
(A/C/Ap; #**5.3**) Strategic Simulations, Inc.; Paul Murray; 1984; O/P; **
Adv/St/1-4

A successor to *Cosmic Balance II*, this detailed strategic simulation of space empires simply lacked sufficient "chrome" to make it enduring.

INVASION ORION
(A/Ap/PET; #**2.5**) Epyx; Jon Freeman; 1979; O/P; N-R
Beg/Tac/1

Originally released on cassette tape for the Commodore PET in 1979, this duel in space was a sequel to Starfleet Orion and allowed players to design their own fleets and fight against a computer enemy (rather than simply another player, as in the first game).



Robosport

JUST ANOTHER WAR IN SPACE
(ST; #**82**) Azeroth; Robert Parkins; 1991; $49.95; N-R
Int/Tac/1

A tactical level space combat game whose title describes it all.

LIGHTSPEED
(I; #74,76,82) MicroProse; Sandy Peterson and Andy Hollis; $54.95; 1991;*+
Adv/Tac/1

A cut-down version of *Hyperspeed*, its utility and game play have been more than superseded by its successor.

MANTIS: XF-5700 EXPERIMENTAL FIGHTER
(I/CD) MicroPlay; Glen Dill, Mark Seremet, Paul Conklin; 1992; $69.95; N-R
Int/Tac/1

Ship-to-ship space combat simulator; available by the time you read this.

MECHWARRIOR
(I; #65,**66**) Activision; Dynamix/Kesmai; 1989; $59.95/$6.00 per hr.; ****
Int/Tac/1-unlimited (on-line)

Now available as a stand-alone game in Activision's new BattleTech trilogy package and on GEnie as *Multi-Player BattleTech*, this robotic combat simulator is like candy — fun and exuberant, although it may rot your teeth.

MERCENARIES
(I) Mindcraft; xxx; 1992(?); $59.95(?); N-R
Int/Tac/1

Similar to *Breach*, very similar to *Breach*, suspiciously similar to *Breach*. Need one say more?

MODEM WARS
(C/I; #**56**) Electronic Arts; Dan Bunten; 1988; O/P; ***
Int/Tac/2; M

A quasi-football contest as if played by the military "for keeps." Strong modem capabilities could not save it from a rapid shelf life.

MOONBASE: The Lunar Colony Simulator
(I; #80,**83**) Wesson International; Robert Green; 1991; $49.95; ****
Adv/St/1

Probably the most detailed and realistic space "construction" set ever produced. Not for the "joystick" crowd, but recommended for the user willing to engage his brain.

M.U.L.E.
(A/C/Ap/I; #3.4,4.1) Electronic Arts; Ozark; 1983; O/P; ***
Int/Tac/1-4**

An all-time computer classic, this was one of the only games ever devised that was playable and entertaining for four humans. Economics made fun! A semi-space game of real estate, market economics (auction) and production, it still holds up well after all these years and, by itself, provides justification for holding onto the 8-bit Atari.

OGRE
(A/C/Ap/Am/ST/M/I; #**36**) Origin; Steve Jackson and Steve Meuse; 1987; O/P; ***
Int/Tac/1-2

Based on the MetaGaming boardgame, this is a faithful rendition of futuristic tank warfare. However, its inability to design or modify the *Ogre* tank and its graphics in today's market condemn this product to "shelf-dust."

OMEGA
(C/Ap/ST/M/I; #64,**65**) Origin; Stuart Marks; 1989; $49.95; **
Adv/Tac/1

Programmers love this "simulation." Design-your-own tank and program it in quasi-computerese to survive the combat environment. If "Androids Dream of Electric Sheep" and you personally "Dream of Assembly and C," you'll love it. Otherwise, it's all geek to me.

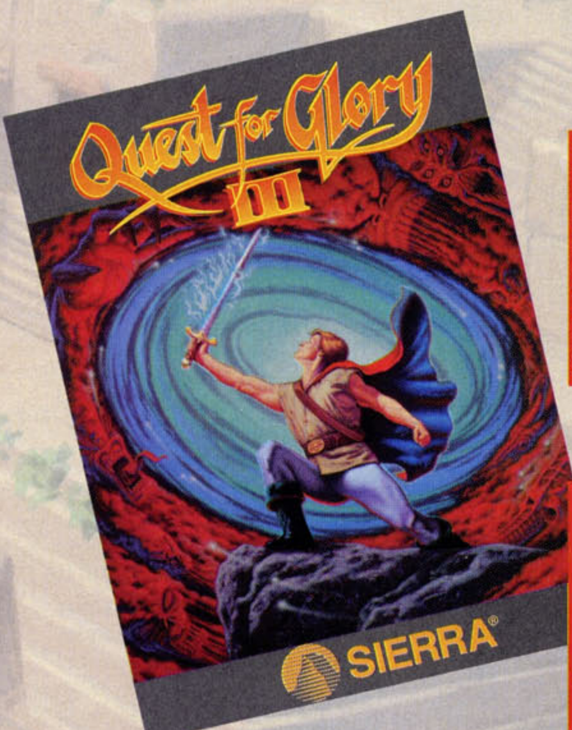
OVERLORD
(C/Am/ST/I; #82,**83**) Virgin; David Perry and Nick Bruty; 1991; $49.95; *+
Adv/St/1

A game of strategic conquest with well-done graphics and a rich and broad texture. However, the program does not adjust well to computer clock speeds, and on a faster machine (16 MHz up), the computer opponent is simply too quick. Great concept ruined by technical oversight.

PLANETMASTER
(Ap; **4.3**) Magnetic Harvest; xxx; 1984; O/P; ***
Int/Op/1

The most *playable* computer role-playing game ever created…

…is also the most *replayable.*





Choose your character and modify his skills and attributes.



Puzzles have multiple solutions depending on your character type.



Every decision molds your Hero… and shapes his destiny.



Overcome obstacles with might, magic, and cunning.

The key to this world is your wits.

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This is the newest chapter in the series *Compute* magazine called "a breakthrough in adventure game design." Play as different character types, approaching problems with different skills and solutions. Every decision you make builds your Hero… and shapes his destiny.

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An early game of planetary ecology in which the player must choose to save six endangered species. A unique simulation, but one which has grown old ungracefully.

REACH FOR THE STARS
(C/Ap/II/M/I; #**3.6**,5.4,51,**55**,81) SSG; Roger Keating & Ian Trout; 1983; $45.00; *****
Adv/Str/1-4

Arguably the best science fiction game ever released. Galactic conquest through detailed exploration, economic and production modules coupled with planetary invasions and space battles make for a product still worth playing.

RENEGADE LEGION INTERCEPTOR
(I; #**79**) Strategic Simulations, Inc.; Todd Mitchell Porter; 1990; $59.95; ***
Int/Tac/1-2

Ship-to-ship combat in space; sequential turns coupled with simultaneous execution make this product reminiscent of early space simulations, but it provides an enjoyable interlude.

ROADWAR EUROPA
(A/C/I) Strategic Simulations, Inc.; Jeffrey A. Johnson; 1987; O/P; **+
Int/Tac/1

Gang warfare in a post-Holocaust "cyberpunk" environment. Quite entertaining when originally released, but its graphics have rendered it obsolescent.

ROADWAR 2000
(A/C/Ap/I; #32,49) Strategic Simulations, Inc.; Jeffrey A. Johnson; 1986; O/P; **+
Int/Tac/1

An early "cyberpunk" simulation, this was a hit when initially released. It is quite dated today, although it can be fun as a semi-"no brainer."

ROBOSPORT
(M/I) Maxis; Ed Killam; 1991; $59.95; N-R
Int/Land/Tac/1-4; M

"Demetrius and the Gladiators" get mechanized in an urban environment; available under Windows (playable over LANs, too!).

ROBOTWAR
(Ap; #**1.1**,**2.2**,2.4,2.5) Muse; Silas Warner; 1981; O/P; N-R
Adv/Tac/1

An early game, similar to *Omega*; touted when released, it is now relegated to slow disintegration on one's shelf of "lost games."



Utopia

RULES OF ENGAGEMENT
(Am/I; #**84**) Mindcraft; Maurice Molyneaux; 1991; $59.95; ****
Adv/Op-St/1

Strategic starship combat in the *Breach* world. The interface is detailed and takes time to learn, although it is logical; the gameplay is extensive. Recommended, although many users initially criticized this game for its lack of a scenario builder.

RULES OF ENGAGEMENT 2
(I) Impressions; xxx; 1993(?); $69.95(?); N-R
Adv/Op-St/1

An updated version, only this time with a campaign builder included. This should be an interesting product and well worth a serious look.

SEUIS
(Ap; #2.6,**3.1**) Strategic Simulations, Inc.; John Lyon; 1982; O/P; N-R
Beg/Tac/1-2

An acronym for "Shoot-Em-Up-In-Space," it delivers exactly what the title promises. Strategy and arcade elements, but of "collector" interest only.

SECOND CONFLICT
(I; #**88**) jSoft; xxx; 1991; $49.99; ***+
Int/Str/1-10

A new approach to *Reach for the Stars*-style space conquest, *Second Conflict* runs under Windows and features a scenario editor to modify victory conditions, change the galaxy and adapt computer opponents.

SPACE M*A*X
(I; #**35**) Final Frontier; T.L. Keller; 1987; O/P; ***+
Adv/Tac/1

A very detailed space station construction simulator. It suffers from two flaws: it is very educational and intellectually stimulating. Hey, I still like it!

SPACEWARD HO!
(I) New World; xxx; 1992; ?; N-R
Beg/Str/1-20

In the tradition of *Reach for the Stars*, an obscure Macintosh-oriented company developed a game where space was literally the next frontier. Replete with horse opera cliches, this is an entertaining "beer and pretzels" version of the more serious economic/military space conquest school. Now, New World Computing is making it both accessible and networkable for the MS-DOS world.

STAR CLASH II
(I) Baen Publishing; Stephen Walton; 1983; O/P; N-R
Beg/Op /1-2

A strategic conquest game where players elect to attack various star systems and follow-through with the surface invasion.

STAR COMMAND
(I; #47) Strategic Simulations, Inc.; Winston Douglas Wood; 1988; O/P; **+
Int/Tac/1

Science fiction role-playing, with heavy emphasis on the role-playing aspects, but does feature some tactical space combat.

STAR CONTROL
(I; #**76**,**77**) Accolade; Paul Reiche; 1990; xxx; ***+
Int/Tac/1

Strategy takes a back seat to arcade action in this graphically intense ship-to-ship combat simulation. Despite (or maybe because of) its lack of depth, it remains an enjoyable challenge.

STAR CONTROL II
(I) Accolade; Paul Reiche; 1992(?); xxx; N-R
Int/Tac/1

The sequel to *Star Control*, this one combines the action combat sequences of the original with the exploration and storytelling of *Star Flight I & II* to create what initially appears to be a playable hybrid.

STAR FLEET I
(I; #5.4,5.5,30,33,37) Interstel; Trevor Sorenson; 1985; O/P; *****
Int/Tac/1

Move from cadet to admiral in a superb rendition of the "main-frame" *Star Trek*. All the bells and whistles one could wish for; this reviewer still plays it today, even though the graphics are primitive.

STAR FLEET II
(I; #60,**65**) Interstel; Trevor Sorenson


History records the evolution of man's journey to the skies…
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ACES OF THE PACIFIC
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and Mark Baldwin; 1989; $59.95; *
Int/Tac/1

The stereotypical sequel—i.e. awful. The product was sufficiently underdeveloped as to destroy the parent company. Released with major lock-up bugs and inability to access certain elements of the program, Interstel promised to make it good. They sent out revised disks, and never did get it to run correctly. A game with all the aspects of "Built by Committee."

STARFLEET ORION
(P) Automated Simulations; Jon Freeman and Jim Connelley; O/P; N-R
Beg/Tac/2
The tactical space combat game published on a cassette tape in 1978, which launched Automated Simulations (Epyx).

STARSHIP COMMANDER
(Ap; #**2.5**) Voyager; Gilman Louie; 1982; O/P; N-R
Int/Tac/1

A starship simulator with individual crew rankings and a more detailed playing environment.

STAR KING
(I; #**85**) Spaceware; Walker Vanning; 1991; $39.95; N-R
Int/Tac/1-7; M

Battleship in space, only with more problems and less play value.

STELLAR CONQUEST
(#**86**) Delphi; Andy Green; 1991; xxx; N-R
Int/St/1-Multi; M

An on-line space conquest simulation.

STELLAR CRUSADE
(Am/ST/I; #48,**50**) Strategic Simulations, Inc.; Norman C. Koger, Jr.; 1988; O/P; **
Adv/Str/1-2

Mr. Koger's first professional design effort was severely marred by a manual which deleted eleven pages of necessary information and made the game an effort to play. Even with the documentation, "Space Ayhatollah," a game of religious *jihad* on an intergalactic scale, was simply not fun.

STRATEGIC CONQUEST PLUS
(M; #**35**) PBI; Peter Merrill; 1987; O/P; N-R
Int/St/1

A *Risk*-like game of conquest with elements of *Empire*.



Wing Commander

TRAILBLAZER
(Ap) Zeta Systems; xxx; 1982; O/P; N-R
Int/Econ/1-4

The authorized computer version of Metagaming's *Trailblazer* board game. A multi-player game of economic speculation in space.

TRUST & BETRAYAL
(M; #**47**) Mindscape; Chris Crawford; 1988; O/P; N-R
Int/Tac/1

A Chris Crawford design which emphasized interpersonal relationships and verbal discourse between aliens. Innovative concepts marred by slow and obtuse game play.

UFO
(I; #**66**) subLogic; Bruce Artwick & Hugo Feugen; 1989; O/P; **
Int/Tac/1

Tired of Flight Simulator? Then try UFO — same mechanics, but a very different sort of aircraft. Personally, this reviewer found flying around looking for fuel to have the same appeal as a gas queue during the Oil Embargo of the 70s.

UNIVERSE
(A; #**4.3**) Omnitrend; Thomas R. Carbone; 1984; O/P; ***
Adv/Tac/1

A detailed simulation of space exploration and trading. Multi-faceted and very deep, its playability suffered from documentation which was hard to interpret as well as an unforgiving game system. Build your own ship to specifications, but a wrong move can waste hours of previous play. Still one of the early classics.

UNIVERSE 2
(I; #**29**) Omnitrend; William Leslie III; 1985;O/P; **+
Adv/Tac/1

The sequel becomes a role-playing model.

UTOPIA
(I; #**98**) Konami; xxx; 1992; ?; ***+
Int/Str/1

Almost a *Moonbase/PowerMonger* hybrid, *Utopia* will allow players to create cities on several different planetary types and to face three or four different alien opponents in trying to defend those cities.

WAR OF THE WORLDS
(At) Task Force; Joseph Delinski; 1984; O/P; *+
Int/Op/1

H.G. Wells' Martian invader novel brought to the computer. Do yourself a favor and curl up with the book instead.

WARP FACTOR
(Ap) Strategic Simulations, Inc.; xxx; 1983; O/P; N-R
Int/Tac/1

Cosmic Balance for Apple machines.

WHEN TWO WORLDS WAR
(I) Impressions; xxx; 1993(?); ?; N-R
Int/Str/1

Aside from the tongue-twisting title, this is scheduled to be a detailed strategic simulation of planetary conquest with emphasis on economics, R&D and production.

WING COMMANDER
(I; #**77**,84) Origin; Chris Roberts; $29.95; 1990; *****
Int/Tac/1

This program set new standards in graphics and gameplay. Graphically intense and luxurious, it places the player in the role of a space combat pilot in an intergalactic war. Although the plot follows a "branching tree," the richness of the entire package makes this a "must-have."

WING COMMANDER II
(I) Origin; Chris Roberts; 1992; $79.95; *****
Adv/Tac/1

Origin followed up its classic with a sequel worthy of the name. The graphics are even better, but the main improvement has been the richness of the plot and gameplay. These products show off what current machines can do.

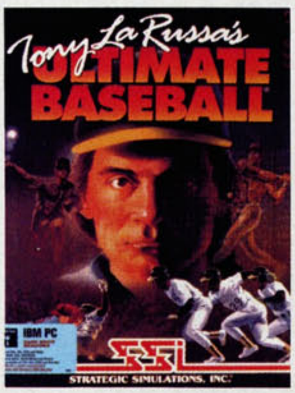
WORLDS AT WAR
(I; #**70**) RAW; John Almberg; 1990; $39.95; N-R
Adv/Str/1-2

A newer and competing version of *Reach For The Stars,* but ultimately less successful than its ancestor. CGW

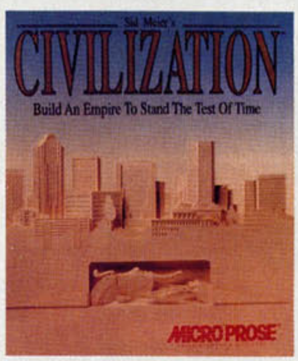
CGW Salutes The Games of the Year



Although November may seem like a strange time to be handing out the Game of the Year awards, the bizarre timing accomplishes two major purposes. First, by nominating games which have reached the market from one Summer Consumer Electronics Show to another, these awards focus on the entertainment software industry's sales year. If the awards were presented on the basis of a calendar year, most Christmas titles would be so new we could not have any reader ratings to factor into our editorial choices for the Game of the Year awards. By waiting to announce the nominations at Summer CES and to award the winners during the Fall, the readers have some impact (but are not the ultimate factor) on our decisions.



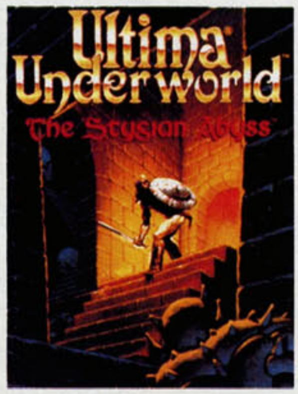
Second, publishing these awards during this time frame provides a counterpoint to our upcoming Christmas Buying Guide in the December issue. The Game of the Year awards provide our critical perspective on games which have been on the market for a while, while the buying guide provides the most up-do-date information we can provide on upcoming Christmas releases that we think will be important.



This year's awards may also be somewhat controversial. Some of the winners do not fit neatly into any particular category. The basic definitions which we try to use for the categories (except for the obvious category of Sports) can be found in the CGW Glossary in this issue's editorial. However, this year's nominees seemed to allude our artificial taxonomy more than in any previous year. So, cue the fanfares, release the balloons, uncork the champagne and trot out the celebrity presenters. It's time for the awards!

Action Game of the Year:

In general, action games are considered to be variants of the running, jumping, shooting, die-a-lot games from the worlds of coin-ops and video games. This year's best four titles add additional elements to the recipe. *Gods,* from **Konami** (by the Bitmap Brothers), offers fast and furious arcade-style action with the prolific number of "boss monsters" one would expect out of, primarily, a cartridge game publisher, but also provides enough exploration and puzzle-solving to raise it above the typical action crowd. *Wing Commander II* from **Origin** (Chris Roberts, designer) built upon the sure-fire success of its predecessor, *Wing Commander* (the CGW Overall Game of the Year in 1991). Adding a speech module and greatly expanding the story elements from those in the earlier game, *Wing Commander II: Vengeance of the Kilrathi* is an excellent product and points toward a successful future for all the products in the *Commander* series. **Spectrum HoloByte**'s *Super Tetris* (Gilman Louie, Alexey Pajitnov, Vladmir Pokhilko, Joel Powers and Les Watts) went back to the basics that made the original *Tetris* a major success. The addition of new elements of strategy with bombs and treasures made an already great game, even greater. Technically, **Psygnosis'** *Lemmings* (DMA Design) should have been eligible for last year's awards, but a technical glitch caused CGW to be late in getting a review copy. With the phenomenal success of both *Lemmings* and its sister program, *Oh, No! More Lemmings!*, we simply had to nominate it for this year's award.



And the winner, according to the several thousand tiny envelopes on the podium, is *Lemmings*, the action-strategy game that requires quick-thinking, fast reflexes and overall strategy to keep those cute little creatures alive on the computer screen. In action, whimsey, challenge and fun, *Lemmings* wins the prize.

Adventure Game of the Year:



This is an interesting category due to the number of quality titles released each year. This year, **Sierra**'s *The Legend of Robin Hood: Conquests of the Long Bow* (Christy Marx) garnered a nomination because its attention to historical detail (including the music) and number of puzzles made it the best graphic adventure since Sierra moved to the full "point and click" interface.

Access' *Martian Memorandum* deserves a nomination because of its extensive use of multimedia effects in a floppy disk-based product. **LucasArts** garnered two nominations. *Indiana Jones and the Fate of Atlantis* (Hal Barwood and Noah Falstein) rates a nomination because of the excellent story, beautiful interweaving of art and music, and its daring attempt to provide three playable game tracks. *LeChuck's Revenge: Monkey Island 2* (Ron Gilbert) rates high marks for both its challenging puzzles and wonderful sense of humor, along with a stunning visual presentation based on new scanning technology.

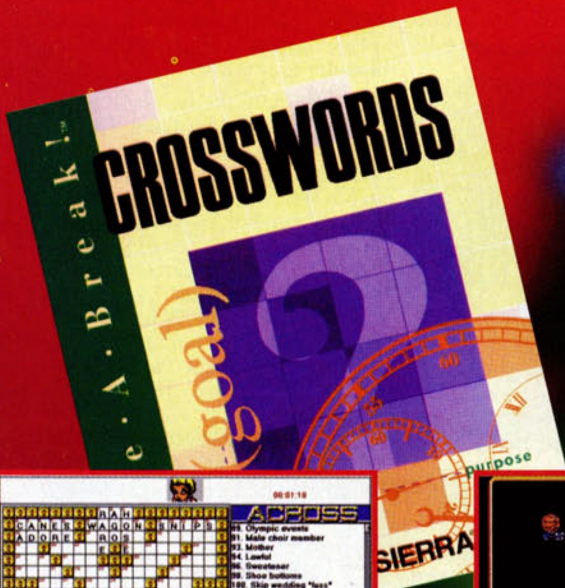
The envelope, stuck together with some type of green, viscuous substance, please. The winner of CGW's Adventure Game of the Year is *LeChuck's Revenge: Monkey Island 2*.

Role-Playing Game of the Year:

In the category CRPG, three sequels and two original games were nominated. **Strategic Simulations, Inc.**'s *Eye of the Be-*

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Take-A-Break! Crosswords ***features over 360 crossword puzzles with scrolling clues and a hint option.***



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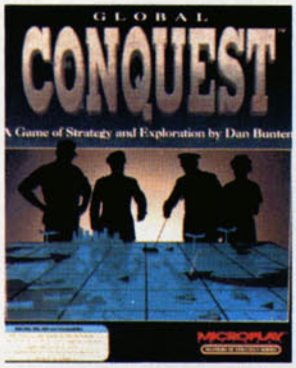
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holder 2 (Westwood Associates) deserves commendation for following in the strong graphic and solid play-balance tradition of the original. **New World**'s *Might and Magic III* (Jon Van Canegham) earns consideration for its new graphic look, use of sound and challenging play. **Origin**'s *Ultima VII* (Lord British) pushed the technological envelope with its new AI routines for party movement and NPC combat, as well as its object-oriented approach to the game map. Of the two original titles, **New World**'s *Planet's Edge* (Eric Hyman and Jon Van Caneghem) reveals new creativity in the types of worlds to be explored and puzzles to be solved, while **Origin**'s *Ultima Underworld: The Stygian Abyss* (Paul Neurath and Blue Sky Software) broke new ground with its 3-D perspective and solid role-playing system.

The winner, according to my simulated 3-D, polygon-filled envelope, is *Ultima Underworld,* the game that's *safer* than being in a real dungeon, but doesn't seem like it.



Simulation of the Year:
This year's period of eligibility really raised the ante on simulations. **Virgin**'s *Shuttle* (Vektor Graphics) and **Three-Sixty Pacific**'s *Megafortress* both offer extremely detailed simulations of unique aircraft. Neither are "load and shoot"-style simulations, but require the player to stretch and learn something about the world they are modeling. *Gunship 2000* from **MicroProse** brings the realism of small unit tactics and updated graphics to a game design which was already a Hall of Fame member. **LucasArts**' *Secret Weapons of the Luftwaffe* (Larry Holland) could have been nominated in the wargame category as easily as the simulation category, since the strategic game is so challenging. In addition, *SWOTL* offers the most detailed flight models of any of the **LucasArts** (nee **Lucasfilm**) air combat series.

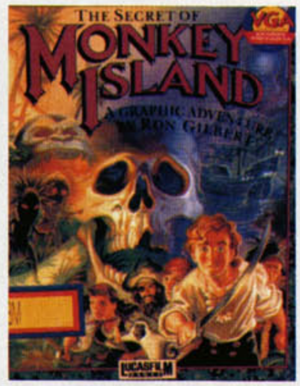


The most daring technological leap, however, was probably that taken by **Spectrum HoloByte** when they released *Falcon 3.0*. Though some readers have suggested that we give Falcon 3.0 the award for being "The Buggiest Game Ever," we have to recognize that the number of bugs is correlative to the improvements attempted in flight model, computer opponent routines, terrain resolution and detail. The company is continuing to improve the product and fix the glitches. In spite of the problems, the flight plans sealed in the envelope reveal that the winner is: *Falcon 3.0*.

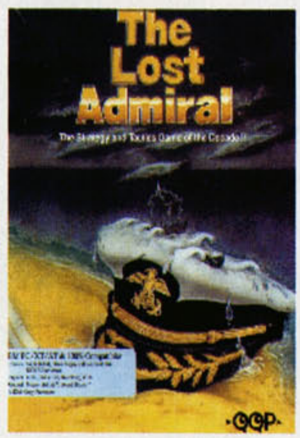
Sports Game of the Year:
Sports games come in such varied packages that we have four widely diverse nominees, from the almost pure action of **Accolade**'s *Mike Ditka Ultimate Football* (Gene Smith) and **Electronic Arts**' *4-D Boxing* (Distinctive Software, Inc.) through the hybrid *Tony LaRussa Ultimate Baseball* (Beyond Software, published by **SSI**) and on to the full statistics of a coaching simulation like *NFL Pro Football* (**Micro Sports, Inc.,** distributed by **Interplay**).

The cleat-marked envelope indicates that *Tony LaRussa Ultimate Baseball* is the winner. Its balanced blend of action and statistics, along with constant improvements from the design team, make it the winner in this year's league of contenders.

Strategy Game of the Year:
Strategy games are relatively easy to define (see the editorial), but they are not always easy to distinguish from a popular subset of strategy games, wargames. Some publishers have found that they prefer to position their combat games as strategy games to remove some of the stigma from the wargames category. Hence, Sid Meier was reluctant to call *Sid Meier's Civilization* (**MicroProse**) a wargame and we are able to justify calling it a strategy game because it offers city construction, diplomacy and economics in addition to warfare. Bruce Williams Zaccagnino's and Thurston Searfoss had something of the same feeling with *The Lost Admiral*, fearing that emphasis on the ship-to-ship combat would cause gamers to overlook the basic strategic challenge. Either game could have been placed in the wargames category as easily as this one.



More traditionally within the strategy game genre are **QQP**'s *Solitaire's Journey* (Andrew Visscher and Bruce Williams Zaccagnino), which provides the greatest number of solitaire variants in the context of two extremely clever campaign games; **Interplay**'s *Omar Sharif on Bridge* (Chris Emsen), which presents an all-around solid package for the novice to intermediate bridge player with enough interface refinements to make a complex game simpler; and **Electronic Arts**' *Populous 2* (Bullfrog), which creates new challenges for the aficionado of 1990's Strategy Game of the Year.



And the winner, if we can get this wet envelope open is *The Lost Admiral*, a strategy game where the artificial opponent gets stronger every time the gamer returns to it.

Wargame of the Year:
A subset of strategy games, wargames emphasize conflict from a command perspective. This year's nominee's range from Gary Grigsby's *Western Front* and *Carrier Strike* (both published by **SSI** and both enhancements of earlier designs by the prolific wargame designer) through Mark Baldwin's (and Bruce Williams Zaccagnino's) *The Perfect General* (a beautifully play-balanced tactical game of WWII-style land combat from **QQP**) and on to Dan Bunten's *Global Conquest* (a strategic level planetary conquest game for 1-4 players, set in the far future) from the **MicroPlay** label of **MicroProse**. In addition, **Three-Sixty Pacific** has a bonafide contender in its first *V is for Victory* release, *Utah Beach*.

The envelope is arriving by long-range artillery and the winner is, *The Perfect General*.

The CGW Overall Game of the Year:

All of which leads us to the most prestigious award. It should come as no surprise to anyone that CGW's Overall Game of the Year is, the papyrus please, *Sid Meier's Civilization. Sid Meier's Civilization* offers a fresh new style of game which combines construction, diplomacy, economics and conflict into a fascinatingly addictive entertainment. The designer who has the most titles in CGW's Hall of Fame has done it again. CGW


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Scorpion's Tale



Ah, there there you are. Come in, come in. My, you look a trifle peaked today. Must be all that heavy-duty adventuring you've been indulging in lately. Take a seat by the fire (chilly, these autumn evenings) while Fred whips up a little something for you. What you need is a vacation, a trip to someplace calm and not so trying on the nerves. There's a gem of an island I know about that would be perfect…

Legend of Kyrandia is **Westwood Studios**' first pure adventure game. Taking a breather from the usual hack'n'slash associated with their *Eye Of The Beholder* series, they have produced what might almost be called a quiet fairy tale.

There are no dank dungeon passages teeming with evil critters and there is no party of heroes cutting a swath of death and destruction as they ramble down the tunnels toward their appointment with Foozle. Just Brandon, the not-too-bright hero of the piece, bumbling his way to the big encounter with Malcolm the demented jester (something along the lines of an early Joker model).

Unfortunately, this rather light-hearted air is somewhat marred by Westwood allowing a four-letter word into the game. Its appearance is all the more astonishing since *Kyrandia* is certainly not an "adult" product by any stretch of the imagination. Outside of this one incident, the game is really quite innocuous.

So why Westwood chose to shoot themselves in the foot this way is a mystery. In any event, parents of younger children are advised that Brandon's demise at the lava river (should that happen) is not a sight for young eyes to see.

That said, let's move on to the game itself. Brandon comes from the "young heir spirited away for his safety" tradition, and has no idea for some time that he's actually the rightful ruler of Kyrandia. Considering some of his actions later on, perhaps this is just as well.

Anyhow, Brandon returns to his cozy treehouse one morning to find his grandfather turned into a stone statue. Right there, you know it isn't going to be a good day. There's nothing that can be done for the old boy, so just clean the place out and get a move on (look everywhere; you never know what you might find).

After the big scene where the tree tells Brandon that (of course) he and only he can take on Malcolm and undo all the nastiness the crazy jester is perpetrating, it's time to explore the environs. No auto-mapping here, so you'll have to dig out the graph paper, but it's all very straightforward stuff and you should have no trouble. Naturally, Brandon snarfs up anything he can get his hot little hands on as he snoops around.

Somewhere in all this Brandon will come across Merith and his marble. Have no fear, Brandon's gonna catch up to him eventually, so if Merith scoots out of sight, don't worry about it. Better right now to find the chapel and have a little chat with Brynn.

She mentions a mysterious amulet and sends our hero out to pick a lavender flower. If you did all your mapping before this, you may already have it, or if not, you certainly know where to find it. Whichever, Brynn gets her flower, performs a little magic act on it (because a little magic is all that she and most other people have these days, courtesy of Malcolm), and hands Brandon a silver rose.

How touching! However, that rose has a purpose, and it ought to be pretty obvious what to do with it (especially considering where you found the other one, not to mention Merith and his marble, but I did anyway). So now, all Brandon has to do is get across the broken bridge. This is also not a problem, if Brandon has looked everywhere and grabbed everything (note: Herman does need a little time, so do this early).

First thing across the bridge that Brandon comes to is the home of Darm and his pal, Brandywine the dragon. Darm is either extremely absent-minded or senile; since the results are about the same either way, it doesn't much matter which.

Anyway, Darm needs something to write with, and sends Brandon out for a quill (this game could easily have been subtitled "The Errands of Brandon"). This is your opportunity to do some more mapping (I knew you'd be thrilled).

By the way, since Brandon can only hold so many items at once (like, ten), it may be necessary to drop some stuff now and then. Find a convenient location, and cache a few things there; they won't disappear.



As Brandon wanders around the landscape, he's likely to come across a hole in the ground. Pretty deep hole. I bet something goes into it. Maybe even more than one something, or two somethings. Whatever, Brandon should have the quill soon after. Then of course he rushes back to Darm, who writes up the magic scroll. Hang on to that scroll, 'cause it's useful in more than one place.

Now it's time for the Great Gem Collection (don't forget to re-visit the stream). The jewels appear randomly all over the place, so Brandon will just have to go looking for them. There wasn't any rhyme or reason I could come up with for the solution; trial and error is what works here. Save the game, and keep trying gems until you find the ones that work (the ones that don't vanish in a spurt of fire).

During his wanderings, Brandon probably came across an ominous-looking cave entrance. Trying to go inside triggers a cameo appearance by Malcolm himself. You'll likely be appalled at the way Brandon smart-mouths the jester, especially as Malcolm is juggling knives at the time (well, I *did* warn you that Brandon wasn't too swift).

However, you just have to sit there and hope for the best, since the conversation is all automatic. Then, Malcolm retreats into the cave and thoughtfully freezes the entrance. Luckily, Brandon has done all the right things up to now (well, hasn't he?), and can shatter the ice with no trouble — ending the scene on a high note.

Now comes the fun part; getting through the dark passages beyond. Hate to tell ya, but some of Fred's relatives are lurking around in there. If Brandon sashays into a dark room without light...well, let's not think about it.

Actually, we'll have to think about it. Dying around here is inevitable. The fireberry branches only last for three rooms, so you'll just have to guess which way to go next (to reach the next bush) and sooner or later (probably sooner) you're going to guess wrong. Save *a lot* as you map out the caves.

Remember that Brandon should grab everything he comes across, and look around (even better, click around) carefully when he gets to the outdoor room (with the braziers on either side of the door). Now, even with the fireberries, there will be some rooms Brandon can't get to because they are too far from a bush. Leave those for now and worry about finishing up the Pantheon of Moonlight. Hint: what you need isn't in the caverns. Don't you wish I'd tell you? Well, you just got your hints. Hope Brandon found the gold coin.

Oh, getting back out (after that door shuts when Brandon goes inside). Yes, that could be a problem, but not if Brandon collected five items. It has to be five. You'll find out why when you use 'em (like I said, our boy has rocks for brains).

Anyway, once the Pantheon is fixed up, Brandon can make it to the infamous lava river. A hot place, but if Brandon doesn't lose his cool, getting over is a snap. That was a lot of trouble for a measly key, but it's an important one, so don't lose it. And now Brandon can scoot across the chasm and finally get out of here before he comes down with claustrophobia.

Of course, the first thing that happens after he leaves is that he gets conked on the head by a falling branch. That's not so bad, really, since Zanthia finds him and drags him into her hut. She's the one who finally tells Brandon about his true identity, and then sends him out to get some magic water.

The fountain is only a few steps away (do NOT pet the frog; or save the game first!), but Malcolm makes another guest appearance and walks off with part of the fountain. Now Brandon has to play hide'n'seek to find it, but that isn't too hard (the magic scroll helps, and this is the last time it's needed), and besides, it gives you the chance to map this area out.

So, after Brandon gets the flask filled (feeling thirsty today?), naturally, Zanthia sends him out after something else — this time blueberries. However, when our boy gets back...no Zanthia. Yup, Malcolm's up to his tricks again, and it will be a while before you see her again.

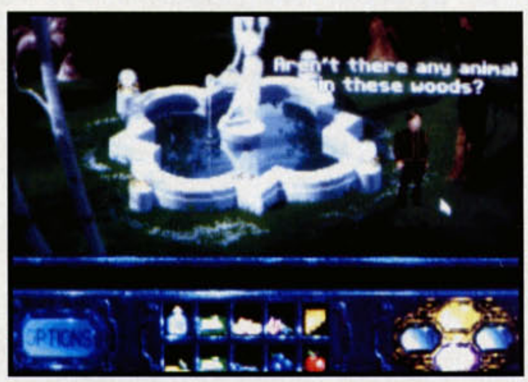
This means Brandon has to make the potions himself. How wonderful. (Of course, you've always wanted to dabble in Alchemy, right? Here's your chance!) First, though, he should check out the woods on the other side of the trap door (more mapping), and as usual, grab everything he can.

Now, about those potions: think primary colors. Think about two of the same. Look over your inventory for ideas. Then save and start experimenting. You'll want one potion of each of two colors, and two potions of the third color. What to do with them should be obvious, if you've mapped around.

So, about that chalice floating in the air that Brandon saw earlier during his peregrinations: bet you already fooled around there and tried to get it, and had the little faun come by to grab it away from you. Tch! Brandon must be getting slow in his old age (grin).

Anyway, our hero should be able to get into the little treehouse now. Then it's only a matter of finding out what to trade for the chalice. It'll be right outside when Brandon leaves.

Speaking of leaving, it's just about time to pay a visit to Malcolm (you've been waiting for this moment, right? hehe). Okay, find the launching point and get going (you *did* experiment with the potions to see their effects, of course?). Take a souvenir before you depart.



On the other side, the first thing Brandon finds is the grave of his parents. Looks a bit neglected. Pity. We (or at

least Brandon) must do something about this. A little token of filial respect will suffice.

How about that! Momma Brandon makes a special guest appearance. Good old mom! And just in time, too. Brandon will need her gift to get past the gate (and those dragons on top of it).

So, Brandon's in the castle at last, and naturally Malcolm is there to greet him. Luckily the batty jester is in a good mood, so Brandon can snoop around. There's a lot of junk lying about, much of it useless. The kitchen and library are the only important rooms on the ground floor.

Before Brandon goes traipsing through any secret passages in the library, he should check out the books. Hmmm, did you hear a click? Bet that means something. But, I'm not gonna spell out the answer; Brandon will have to do that on his own.

Luckily for Brandon, the secret passages are not full of Fred's pals, but it does help to see in there. When Brandon gets to the right spot (which will be obvious), a certain spell will help (this is another of those trial and error jobs, and one more is coming up).

Speaking of up, let's visit the next floor. Hey, it's our old buddy Herman (the guy who fixed the bridge, way back when). Only he doesn't look too good. In fact, he looks downright unhealthy and that saw is *very* sharp; I don't recommend trying to just waltz by it without some precautions.

When Brandon does get into the room, he'll find a statue of someone he's met before (now you know where all those people disappeared to!). What's important here are the bells. Yep, this is the trial-and-error puzzle I said was coming along. Brandon only has to hit four of them, in order. Think wrap-around here.

Okay, it's time to see what's behind those doors at the back of the Great Hall. Hmmm, the Royal Foyer, with a locked door and three pillows. Now what do you suppose could go on those pillows? Oh yeah, I forgot, this is trial and error, too, but nothing bad happens if you make a mistake.

However, save the game here, because once the vault door opens, there's no opportunity to save afterwards! All right, now Brandon can fiddle around to get the door open. Naturally, Malcolm pops in, but Brandon pops *him* a good one on the jaw and strolls into the Kyragem room (not smart, our hero, but he has a good right!).

This is where it gets tricky. Malcolm will recover soon and he won't be in a good mood. Brandon has only a short time to prepare himself or he'll end up as the newest addition to Kyrandia's first rock group. Reflect carefully on what needs to be done (and it is best done quickly). Whew! Malcolm does himself in, the gem is repaired, everyone is restored, peace, light, and joy are returned to the world, etc., etc., etc. (At least until the next time you go adventuring).

And that's about it for now. In the meantime, if you need help with an adventure game, you can reach me in the following ways:

On Delphi: stop by the GameSIG (under the Groups and Clubs menu).

On GEnie: visit the Games RoundTable (type: Scorpia to reach the Games RT).

By US Mail (enclose a self-addressed, stamped envelope if you live in the US):

Scorpia, PO Box 338, Gracie Station, New York, NY 10028.

Until next time, happy adventuring! **CGW**


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Abstracts from the Journal of Computer Game Design

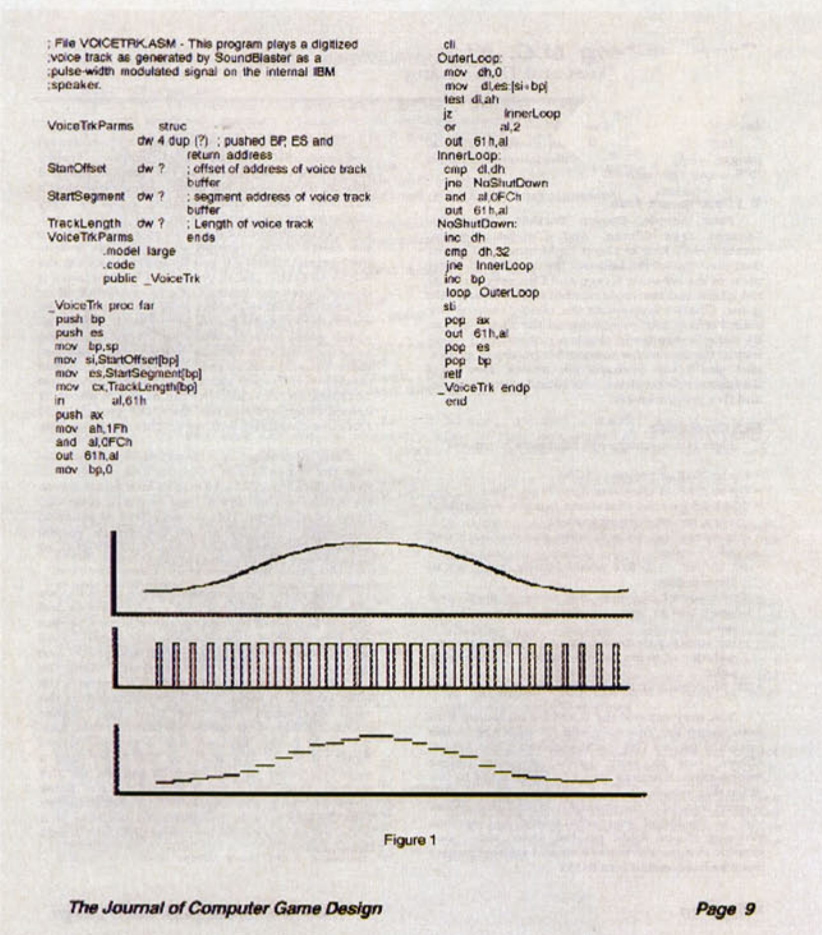
CGW *regularly prints abstracts from* The Journal of Computer Game Design *in order to stimulate thought concerning the philosophies behind and development of computer games. The last article was in* CGW #95. *This article covers* JCGD Issue 5.6.

Making the PC Speaker Speak

by Hal Martin

Although various high level languages allow programmers to use functions such as **sound()** and **nosound()** (used in C to enable the program to play a single melodic line of music on the IBM's internal speaker), it is difficult to figure out how to program speech and more complex sounds on the internal speaker. Martin offered some instructions on accomplishing the task.

He noted that the internal speaker can only be turned off and on. There is no amplifier feature to increase/decrease sound gradually. When the higher level languages use their particular function to play a single melodic line, they are directing the off and on switching of the speaker through the ouput of Timer 2 in the PC's 8253 timer chip.



```
; File VOICETRK.ASM - This program plays a digitized
;voice track as generated by SoundBlaster as a
;pulse-width modulated signal on the internal IBM
;speaker.

VoiceTrkParms     struc
              dw 4 dup (?)  ; pushed BP, ES and
                            return address
StartOffset    dw ?         ; offset of address of voice track
                            buffer
StartSegment   dw ?         ; segment address of voice track
                            buffer
TrackLength    dw ?         ; Length of voice track
VoiceTrkParms               ends
         .model large
         .code
         public _VoiceTrk

_VoiceTrk proc far
 push bp
 push es
 mov  bp,sp
 mov  si,StartOffset[bp]
 mov  es,StartSegment[bp]
 mov  cx,TrackLength[bp]
 in        al,61h
 push ax
 mov  ah,1Fh
 and  al,0FCh
 out  61h,al
 mov  bp,0
 cli
OuterLoop:
 mov  dh,0
 mov  dl,es:[si+bp]
 test dl,ah
 jz         InnerLoop
 or         al,2
 out  61h,al
InnerLoop:
 cmp  dl,dh
 jne  NoShutDown
 and  al,0FCh
 out  61h,al
NoShutDown:
 inc  dh
 cmp  dh,32
 jne  InnerLoop
 inc  bp
 loop OuterLoop
 sti
 pop  ax
 out  61h,al
 pop  es
 pop  bp
 retf
_VoiceTrk endp
 end
```

Figure 1

The Journal of Computer Game Design **Page 9**

The Speaker Speaks

To create speech, however, Martin observed that one must implement a pulse width demodulation scheme. The figure on this page shows a sine wave as it appears both pulse modulated and demodulated. Martin's approach allows the printed listing to support either a SoundBlaster compatible board or, of course, the internal speaker.

The function in the listing can be called from Microsoft C++ using the prototype:

extern "C" void far VoiceTrk(char far *Start, int Length);

where Start is a far pointer to the beginning of the array of samples and Length is the number of samples.

Martin went on to explain how the function sets up two loops and admits that this is a crude implementation. However, the full article should provide some idea of where programmers can begin in working with the internal speaker.

Programming "M.C. Kids"

by Gregg Iz-Tavares and Dan Chang (*M.C.Kids*)

Chang and Iz-Tavares shared some of their discoveries in dealing with the limited features of the 8-bit Nintendo Entertainment System. Their Nintendo game, M.C.Kids, is a platform game where the Hamburglar from the MacDonald's commercials has stolen Ronald MacDonald's magic bag and the player (as either Mick or Mack) has to retrieve the bag before dire consequences set in. The game offers over 40 playable levels and uses 28 different creatures, 16 different objects and 27 varieties of platform.

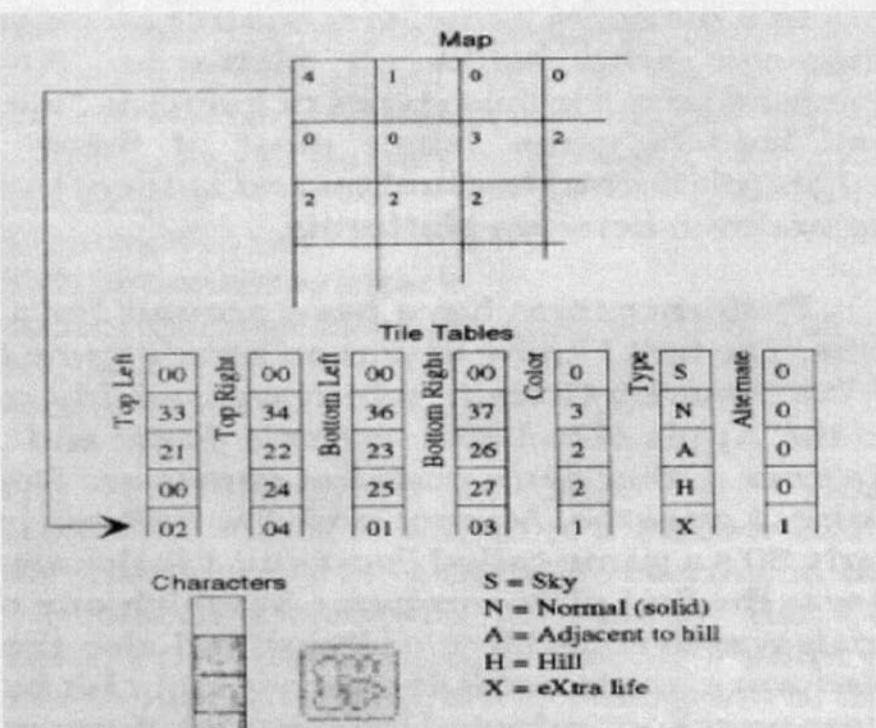
The article had very useful information on setting up tilesets for platform games. The designers observed that each tile type has seven attribute bytes to define it. Of those, the first four

define which characters to put in the screen memory for each corner of the tile; the fifth byte defines which colorset the tile uses; the sixth specifies the type of tile it is (e.g. 0 = Sky, 1 = Solid, etc.); and the seventh records any transformation characteristic (e.g. will ice turn to water when stepped on?).

In addition, each tile has five collision routines (a later article is expected to explain these more fully), two contour tables and various flags like AT_BEHIND (which enables an object's sprites to be displayed behind the tile) and AT_ABOVE (which allows for tiles with height (like hill tiles) to be placed atop a given tile).

Each tileset may contain up to 64 characters and, at most, 64 tiles. Further, tilesets can use no more than four colorsets, since the NES can only display four character palettes. Finally, each level in the game may consist of up to four different tilesets. Here is an example:

In this example, the tile at position 0,0 in the map is retrieved. It is tile 4. Looking into the tables, one finds the four characters that make up tile 4 and places them in their proper positions to create a 1Up block (in M.C.Kids, this creates an extra life for the player). Note that the tile uses colorset 1 and is of type X (= extra life).

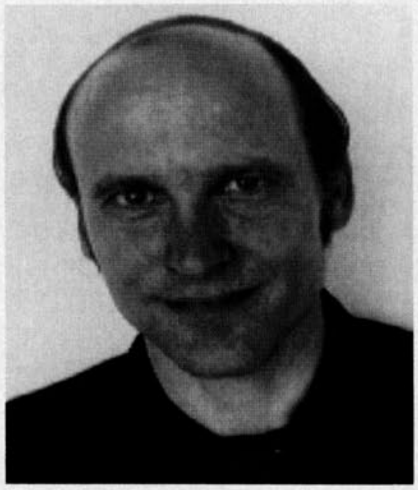


Tilesets For M.C. Kids

The article also explained how to animate shapes by using sprites and noted that the "hot spot" for most videogame shapes is usually the bottom center pixel.

Lessons from "Patton Strikes Back"

by Chris Crawford (*Balance of Power, Patton Strikes Back*)



Chris Crawford

Chris Crawford closed out the issue with an article based on his speech at the Computer Game Developers Conference. Here are the five basic lessons which Chris believes he learned from designing, producing and developing *Patton Strikes Back*.

Lesson 1: Start with a clear mission statement.

Crawford states that he knew exactly what he wanted to do with the design from the very beginning. This simplified the difficult choices in the design trade-off process so that Chris didn't have to decide which feature/option was better. Instead, he merely had to decide which design decision met the mission statement.

Lesson 2: From Miss Goody Two-Shoes to Hairy Hacker

There is always a tension between clear, commented and well-structured code and those quick and dirty hacks that help a programmer/designer finish the game. Chris suggests that when one is working in the long-term (and especially when one might need that same routine again some day), one should strive for clean, structured, commented code. During crunch time, there is always the chance to cut corners and get the product out the door.

Lesson 3: Don't be seduced by the cleverness of your own ideas.

If a great idea makes it almost impossible to get a marketable conversion out the door, don't sell yourself short by forcing Macintosh design decisions into an IBM world.

Lesson 4: Bake the cake first, then add the icing.

Publishers like glitz. Designers like games. Crawford suggests that designers create the game with the features they want in it and let the software publisher's producers and marketing experts determine what kind of "icing" to put on the "cake."

Lesson 5: There ain't no rest of us.

Crawford attempted to circumvent the wargame aficionados with *Patton Strikes Back* and reach the "rest of us." It didn't sell. He implies that fighting the aficionados is like fighting stock market momentum. Without the support of the hardcore, one cannot make money on a game. CGW

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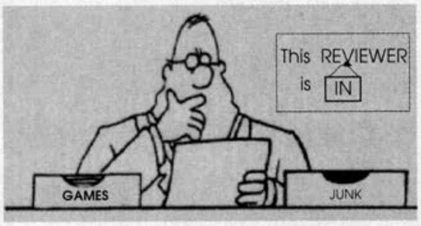
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MasterCard

Circle Reader Service #141

by Allen Greenberg



Writing about a computer game program is comparable to performing delicate brain surgery while tap dancing — it demands skill, knowledge and a willingness to be entertaining. I don't imagine that it's easy for an outsider to fully understand the fondness we have for this hobby, yet that has never stopped me from attempting to explain to someone who is both foolish and polite enough to ask me just what it is that I do in my spare time.

Years ago, I worked alongside a friend named Miguel who had come over to the United States from Ecuador. "Do you have one of those?" Miguel once asked, pointing to a copy of *Byte*, through which I had been browsing during lunch.

"No," I answered, taking the question far too technically. "I have an Amiga, Miguel. An Amiga."

Miguel's expression became very serious as he considered the literal translation of my statement. "Yo comprendo. Don't worry, I will be muy discreet." Later, I invested in a IBM clone — just to be safe.

My two children, Amy and Charles, have been an unending source of pride and delight for me. Yet, there remains what I might have once called a "generation gap" when it comes to "daddy's favorite hobby."

"I don't want to do my homework," complains Amy, age 9. "Why can't I do what daddy's doing?"

I am fully entrenched in my latest assignment, and barely manage to call on my reserve of fatherly wisdom without breaking my concentration. "Because, sweetheart...**FIRE!**...we all have a job to do. Daddy has to finish this...**YES!**...game so he can write about it for his magazine. Your job is to finish your...**UGH!**...math problems and study for your spelling test. **ALL RIGHT!** Do you understand, love?"

Amy is a very expressive girl, but she does as she is told. "Talk about your mixed up values..." I hear her mutter as she retreats to her room. "I'm writing another letter to Dan Quayle."

It becomes clear to me that my enthusiasm for the subject matter of my writing will never be shared by someone unacquainted with computers. Many "mom & pop" computer hobby stores, where a collection of interested listeners may have once been found, have now ceased to operate due to an overly competitive marketplace or the devastating effects of software piracy. Yet, many malls and shopping centers may boast of having a software store, and it is to one of these which I turn. Perhaps, I speculate, the manager would set up a small chair and table for me, with the words "this reviewer" tastefully displayed.

Rather than disturb the staff, I quickly approach one child whose curious eyes have become fixed on a copy of *Computer Gaming World*. At his request, I happily sign a copy of the magazine which I am then forced to purchase. As it turns out, the tyke really didn't want a magazine "some guy just wrote all over." He also admits to not actually having any money with him and was certainly not supposed to have talked to a stranger in the first place.

My first attempt to earn the trust of a fellow grown-up produces different results. To one attractive woman looking for a recommendation I quickly hand a copy of *Civilization*. "Can you balance your checkbook with this? I'm looking for a program to balance my checkbook." Only slightly disappointed, I replace *Civilization* with a copy of my favorite home-accounting package.

"Is this any good?" she demands. "Who uses it?"

"I use it."

"Is that all? Don't you know anyone else who uses it?"

"The entire United States House of Representatives," I assert, wondering if she will accept the good-natured humor of my reply. Sadly, she does not.

My next conversation is with an experienced computer game player, in whom I am sure I will discover an intellect as keen as my own. "Have you ever gotten to first base with Princess Rosella?" he blurts. "Do you know Lord British? Tell me about Lord British!"

"Well, Lord British...sure I know Lord British. Lord — only his best friends get to call him 'Lord' — he's very...young."

"How young?"

"He's so young...did you know that *Ultima II* had to be delayed because of a bad case of diaper rash?" I earn my first laugh of the day, but the conversation continues.

"What about Scorpia? Tell me about him."

"*Her*," I correct. "Scorpia is a woman."

"Did you ever meet him?"

"Her," I patiently insist. "No, I've never met Scorpia. No one has ever met Scorpia."

"Then what makes you think that he's a her, when no one has ever met him?"

"Her. Because she...says so."

"Investigative reporting," muses my fellow hobbyist, "Nothing like it in the world."

My attention is abruptly caught by an argument which suddenly erupts nearby. A young adolescent is petitioning his parents to buy him the package containing *Ultimas IV*, *V* and *VI*, recently released by **Origin**. The remarks being made by the parents clearly indicate that they are imagining this program to be some very unsophisticated arcade game, and not at all the worthy material for which their child is whining. I cannot help but offer my advice.

"I understand your concerns," I tell them. "I'm a parent myself. This game isn't at all like what you're imagining! Sure, there's some fighting, but only in the name of virtue. What is far more important is that your offspring will have the chance to examine a society's values, as well as how they consider one type of virtue in relation to another; Compassion over Valor, Honor over Sacrifice, Justice over..."

"It's Sacrifice over Honor!"

I whirl around to see that two small figures have returned for me, their mouths busily attacking mounds of ice-cream. "He always gets that one wrong!" exclaims my daughter, in between mouthfuls.

"It's not like he doesn't have the hint book!" responds her five-year-old brother.

"HINT BOOK?" comes the sudden gasp from the parents behind me. At once, the already quiet store becomes completely mute. An elderly woman scowls at me and turns away. Employees, one by one, return to their assigned tasks without comment. A dog growls at me. The disheartened adolescent, realizing that he will have to state his case to his parents some other day, drifts off into the shadows of the Nintendo department.

I turn to my children and for just a moment they pause in their feasting. This is no longer that good-natured game player they face — this is DADDY whose anger they have invoked.

Quickly, small hands are raised to me, palms forward, as tiny fingers strain to separate. "Live Long And Prosper daddy." I sigh. They know all the right buttons.

At home, I wonder if I have truly emerged from the flames of consumer hell in order to become a better reviewer. Perhaps I should at least phone *CGW* and explain to them that I've been suffering from a rare software virus for the last few weeks. Naaaah!

...

Within a week, a package is delivered to my home from Anaheim, California. In the package is some new software release for review, along with a one-word message written in Johnny Wilson's familiar scrawl, "Enjoy." Reflecting on my experience, I begin to grin a bit, (or "(g)" as we are fond of saying on the bulletin boards) despite the risk of damage to my thawing facial musculature. Of course I'll "Enjoy!" Why else would I be doing this? **CGW**

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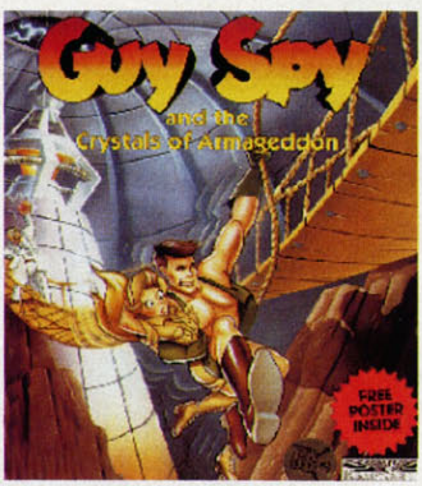
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Circle Reader Service #115

Guy Spy Never Dies (He just reboots.)

by David M. Wilson

TITLE:	Guy Spy and The Crystals of Armageddon
SYSTEMS:	MS-DOS, Amiga, C64/128, Mac, Atari
PRICE:	$49.95
VERSION REVIEWED:	Amiga
PROTECTION:	Non-Repro Code Sheet
PUBLISHER:	Readysoft Inc. Richmond Hill Ontario, Canada



When General Atterman suggests using his top agent on a crucial mission, Admiral Pierce thinks it's a joke. A great percentage of President Truman's military advisors and their aides agree with the cynical Admiral. After all, it must be somewhat difficult to take an agent named "Guy Spy" too seriously. President Truman disregards the humor surrounding the agent's name. His desire is to see the most effective operative assigned to the mission.

So it is Guy Spy who is elected to locate the infamous Baron Von Max, a villainous lout who has already ordered the termination of the super agent's life. As the story begins, Von Max is already in the process of assembling a Doomsday Tower, a weapon that makes nuclear weapons seem like pea shooters, and the Baron's men are in the process of gathering energizing crystals which will provide the necessary energy to make the tower fully operational.

That is the basic plot of **ReadySoft Incorporated**'s *Guy Spy and the Crystals of Armageddon*. The player, as Guy Spy, must overcome a multitude of obstacles between himself and the maniacal Baron Von Max in order to save the world from certain destruction. The story is less than carefully crafted cliffhanger material. Fortunately, the game program neither stands nor falls based on the pulp style plot.

Smooth-scrolling animation (remember that this game is from the creators of *Dragon's Lair*) gives the player the feeling of participating as the lead part in a Saturday Morning cartoon. The graphics are beautiful, if in some scenes a bit gory. The soundtrack is worth an honorable mention, even if it is a bit too short so it becomes annoying through its repetition.

There are 13 exciting game scenes and Guy has a different goal with each scene change. So, Guy Spy discovers himself in more than just a shoot-em-up arcade game, he finds himself in a shoot-em-up that is sprinkled with a variety of animated scenarios.

Subway To Espionage

Warning: *This section of the review offers a blow-by-blow summary of the action sequences. Readers who wish to maintain elements of surprise when playing the game may wish to skip to the "I vs. Spy" section.*

The first scene is an ambush inside a subway station. Guy is ambushed on the platform by Von Max's henchmen. It is basically a shoot and dodge scene. The trains rushing through the station make this task more difficult as they block Guy's shots. The trains also have a saving grace, as they also provide cover for our operative.

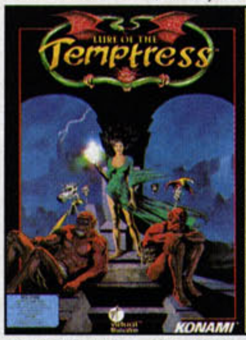
Scene two was my personal favorite. Guy jumps in a mountain gondola car and is ambushed again. Guy must leap out from behind cover to shoot his attackers and then leap back behind cover to avoid being shot. To make matters more difficult, his enemies also have sticks of dynamite which they will light and attempt to throw. The player's point of view in this scene is excellent and easily allows for the suspension of disbelief.

I hate to even mention the awful scene in Olga's cabin. Olga is that fat woman people are always waiting to hear sing. Guy finds himself cornered in her cabin and, since Guy will not bring himself to strike a woman and Olga doesn't mind slapping our hero around like a rag doll, Guy might be

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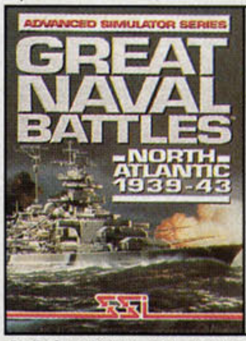
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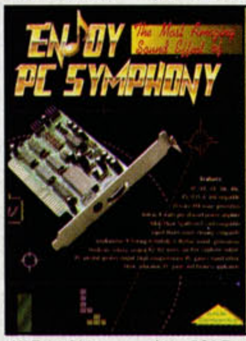
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better off signing up for Chivalry Anonymous rather than going through the concatenations required to get through this sequence. Guy works hard just to be able to maneuver around Olga, until he can reach the safety of the cabin door. Once this is accomplished this super agent runs off like a puppy with his tail between his legs. Even on the simplest level, this task seemed next to impossible. Olga can move rather quickly for such a large woman.

Leaving the cabin, Guy grabs a pair of skis and begins to ski down the side of the mountain. The ski run he has chosen is not exactly a "bunny slope." Further, his movements are hampered by the Baron's henchmen riding in the ski lift overhead. These henchman, it seems, are having a blast (pun intended) by tossing sticks of dynamite directly in Guy's path.

Guy leaves the snowy cold and moves to Egypt where he pursues Von Max into a pyramid. The pyramid is a complex maze which will require one of two things for the player to complete: either a gift for cartography or an outpouring of blessings from Lady Luck. The maze is full of traps such as pits and slamming doors. A giant spider and (good thing the player is Guy Spy and not some *other* heroic explorer of ruins™) a vicious snake are the secondary "villains" to be evaded in this sequence.

In one chamber of the maze, though, Guy confronts the primary villain, an evil being named Ramah-kul. Ramah waves his arms and sends flashing energy bolts in Guy's general direction. Fortunately, for the forces of truth, justice and victory in the Cold War, Guy is able to snatch up a nearby sword and throw it at Ramah. The Sword visibly damages Ramah, so Guy continues repeating this action while dodging Ramah's energy bolts until the evil being is destroyed.

In another chamber of the maze, the super agent encounters a behemoth mummy. Using a sword, Guy cuts the mummy to ribbons (or is that bandages?). Then, just as he is prepared to exit the maze, Guy is once again called upon to demonstrate his expertise (or lack thereof) with a sword. He is rushed by a group of scimitar-wielding bedouins and, bad news for our courageous cold warrior, the noise of the battle draws more and more of them.

If Guy should be skilled enough to defeat the swordsmen, the next leg of his journey takes him to Kenya. He meets his contact, a real babe (real cold warriors are sexist and proud of it)! After she gives him the message, she exits with a flirtatious wink. Unfortunately, before Guy can follow her and succomb to her feminine wiles (real cold warriors are...well...I guess there's no need restating the obvious), she is abducted and Guy is left to duke it out with a tough goon. This fistfight, for true action gamers everywhere, is cleverly designed and very enjoyable.

Guy's message leads him to Peru. As he makes his way over a log that has fallen across a gorge, he is ambushed by Peruvian Indians in the employ of Von Max. Guy takes up a stick and uses it as a quarter-staff to battle these natives in a scene that is reminiscent of Robin Hood's meeting with Little John.



The problems with the Indians are not over yet. Guy travels across a clearing in the jungle while avoiding thrown spears and pits filled with sharpened stakes. Guy makes a bow and arrow that he *can* use to defend himself, but many will find it so difficult to use that it is much simpler just to run and avoid the spears and pits (in the tradition of another well-known adventurer™).

Eventually, Guy locates the Doomsday Tower inside an ancient Incan temple. Of course, it is not unguarded. In addition to dealing with the guards, the agent must also avoid the tower's automated laser cannon. He leaps and rolls across the screen in order to dodge the laser. He picks off the guards one by one.

Finally, he is inside the tower and at last confronts the infamous Von Max. The evil baron holds a knife poised at the throat of Guy's Kenyan contact. Naturally, like most pulp heroes, Guy does a really stupid thing. He tosses aside his weapon. Von Max sneers and closes on Guy, intent on cutting him to pieces with the knife. This scene can be quite grisly should guy not find a way of winning the final battle with Von Max.

I vs. Spy (Critical Notes)

Despite the pleasure I derived from the game, I must note a few minor details. The manual was full of several minor spelling errors. The pulp-like fiction therein was long and drawn out. Indeed, it was overall unnecessary to get the player into the fiction of the game and the game would have been much more enjoyable if the set-up plot would have unfolded more on the screen and less in the manual. Despite these minor flaws, however, the manual was fairly well-organized and did a viable job of explaining the various goals and controls for each individual scene in an easy-to-follow format.

Although the game boasts three levels, I rather doubt that many players would play on the two harder levels. I tried, although I failed miserably. ReadySoft's customer support told me that they had a difficult time playing the two higher levels. Nevertheless, I found the game quite satisfying on the simplest level.

Many will complain about the save game option, however. It only allows for saving one game per disk. If a player decided to save on each level, therefore, it would require 13 different disks. For an arcade game, where "save games" are rare rather than standard, this seems acceptable. Players should be forewarned, however.

In short, this game does a great job of providing thrills for the average arcade player. The animation is eye-catching and the battles offer a sufficient amount of variety. *Guy Spy* is not the sort of game I would take down from the shelf again and again, but should guests arrive, I would have a great package to demonstrate the wonders of computer animation, sound, and arcade fun in an easy-to-learn game. CGW

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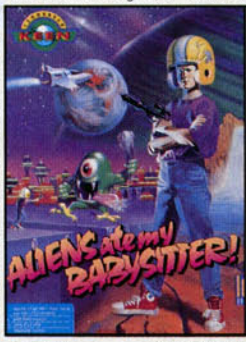
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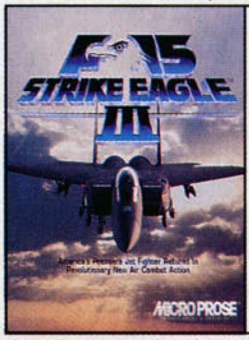
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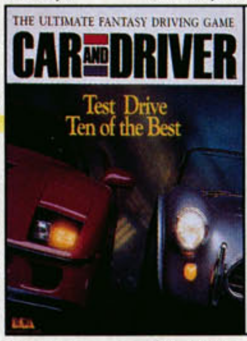
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- Back to the Future 3 $15
- Barbarian $ 9
- Bargon Attack $24
- Bart Simpsn House Wrd $31
- Battle Master $37
- Battlestorm $32
- Bill & Ted's Excllnt Adv $19
- Blockbuster $ 5
- Blockout $28
- Brain Blaster $28
- Budokan $17
- Colorado $ 6
- Continuum $29
- Cool Croc Twins $24
- Crackdown $17
- Dark Century $27
- Day of the Viper $19
- D Generation $32
- Dig Dug $ 6
- Dr Doom's Revenge $ 9
- Dragon's Breath $27
- Dragon's Lair 1 $24
- Dragon's Lair 2 $34
- Drgn's Lair Singe Cstl $34
- Freakn Funky Fuzzballs $19
- Galactic Conqueror $31
- Galactic Empire $27
- Galaxian $ 6
- Gauntlet 1 or 2 $ 9
- Gobliiins $24

IBM ACTION/ARCADE
- Gold of the Aztecs $29
- Grave Yardage $12
- Gremlins 2 $ 9
- Guy Spy $29
- Hard Driving 2 $38
- Hare Raising Havoc $32
- Home Alone $27
- Killing Cloud $19
- Knight Force $29
- Lemmings $32



'AMAZON' recaptures the fun of the 1950's drive-in movies. Travel to unexplored regions of the Amazon, fight 10 foot ants, and find emeralds stolen by Cortez. Amazing cinematic effects such as multiple camera angles, flashbacks, zooms, pans, & fades. Features full digitized voices & sound effects. **$39**

- Lemmings Data Disk $19
- Light Corridor $29
- Light Quest $32
- Loopz $24
- Monty Python $15
- Ms Pac Man $ 6
- M.U.D.S. $16
- Mystical $27
- Nevermind $25
- Night Breed $15
- Night Shift $17
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- Nova 9 $21
- Obliterator $ 6
- Oil's Well $15
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- Pipe Dream $19
- Pitfighter $22
- Powerdrome $12
- Power Hits: Battletech $32
- Power Hits: Sci Fi $32
- Punisher $ 9
- Roller Babes $25



In **'UTOPIA'** you decide whether to spend funds building solar panels and life support structures or a security HQ and war machines. Features 10 independent alien races to defend against, 3D isometric command views, overhead maps of fuel, oredeposits, radar data, and enemy movements. **$31**

- Rotox $20
- Savage $19
- Sierra Arcade Bundle $24
- Silpheed $21
- Simpsons Arcade Game $31
- Sliders $27
- Space Ace 1 or 2 $34
- Space Wars $37
- Speedball 2 $25
- Stellar 7 $21
- Stormlord $ 9

IBM ACTION /ARCADE
- Super Off Road $15
- Super Pac Man $ 9
- Super Space Invaders $25
- Take a Break Crosswrd $29
- Take a Break Pinball $29
- Take a Break Pool $29
- Taking of Beverly Hills $24
- Teenage Mtnt Nnja Trtl $25
- TMNT Manhatten Miss $31
- TMNT Arcade $24
- Terminator $34
- Tetris Classic WIN $27
- Tristan Pinball $39
- Troika $19
- Vaxine $24
- Viking Child $32
- Volfied $24
- Wild Streets $31
- Wild Wheels $32
- Wrath of the Demon $29
- X Men $ 9
- X Men 2 $25
- Xenocide $12

IBM HARDWARE
- Ad Lib Sound Card $49
- Ad Lib Gold 1000 $179
- Adlib Progrmrs Manual $27
- Adlib Surround Sound $64
- Adlib Telephone Module $64
- Ad Lib Visual Composr $75
- Ad Lib Speakers $15
- Flight Stick $43
- Flight Stick w Falcon $46
- Game Card 3 $39
- Gravis Ultrasound Brd $149
- Champ Joystick $24
- Maxx Control Yoke $59
- Maxx Rudder Peddals $39
- Mouse 3 Button $29
- Pro Audio Spectrum 16 $199
- Pro Audio Spctrm Plus $139
- Sound Blaster $99
- Sound Blaster Pro $189
- Sound Blstr Pro Basic $159
- Snd Blaster Speakers $15
- Snd Blaster Voice Edtr $54
- Sound Star Snd Board $14
- Thrustmaster Joystick $69
- Thrstmstr Pro Joystick $109
- Thrstmstr Ruddr Pedal $109
- Thrustmstr Weapn Cntrl $79
- Thunder Board SndBrd $84
- Thunder Board for WIN $109
- Thunder Board Spkrs $15
- Video Blaster $349

IBM SIMULATION
- 688 Attack Sub $19
- A10 Avenger $46
- A10 Tank Killer 1.5 $34
- Aces of the Pacific $42
- Aces Pacific Mission 1 $27

Silly Parent, Carts are for Kids!

Why Edutainment Doesn't Make It In A Videogame World

by Sara Reeder

All I want is a reasonable explanation. And I know I'm not the only one. As I write this, conscientious parents across our great land are watching in quiet desperation as their kids spend yet another golden summer afternoon inside, glued to the Nintendo deck.

It's been like that for about seven years now. From where we sit, reports of the video game market's imminent demise appear to be highly exaggerated. Here we've got the best-selling piece of hardware in computer history — and the one most closely identified with children. We've heard six years' worth of concerned talk about the possible negative effects of video games. (The only thing that generates more bad press than video games is the TV set itself.) And as a counterpoint, we keep reading articles by people like me extolling the promise and wonder of the new generation of kids' software, and the immense potential of computers as a learning medium. It doesn't add up. According to the basic theories of market dynamics, these factors should naturally bring about a large, sudden explosion of great video game software that kids enjoy, and parents can live with. In the more responsive disk-based market, these products would have started appearing within a year of the first wave of bad press. (Remember the Surgeon General's 1987 report on the life-threatening dangers of "Nintendo Thumb?") But it didn't happen then. In fact, it's just barely started to happen now. And it makes me wonder…am I just paranoid, or is this an insidious Japanese plot to create a generation of dazed, twitchy Americans with great eye-hand coordination? My curiosity about this led me to over a dozen discussions with developers, publishers, parents, and other interested parties. While the video game industry has never been held up as the paragon among free markets, it became increasingly clear that if you were designing a system specifically to discourage innovation of any kind, you could hardly do better than the one that puts videogames in your kids' hands. It seems that every stage in the development, distribution, and retailing of game carts favors those who don't deviate from the tried-and-true formula of fighting, driving, and shooting games. Let's take a look around, starting at the top.



The Developers

Imagine that you're a computer game developer in 1985. It's morning in America, Steve Jobs is about to get booted out of Apple, and, with EGA color on the horizon, computer technology is improving at warp speed. A popular Japanese coin-op arcade company comes out with an antediluvian 8-bit throwback of a cartridge machine for the home. It reminds you eerily of the old Atari deck, now being used as a bookend in your kid brother's room. The games are flat and cartoon-like. You can't save data. The company holds developers to about a hundred different design restrictions designed to squelch any possible creative impulse. The company proceeds to sell millions of units and make billions of dollars, all the while selling variants of the same fighting, shooting and driving games to the same mesmerized group of 7-to-14-year-old boys. Occasionally, someone will try something different: a sports game, or a kids' game. If there's a good license involved, like *Sesame Street* or *Barbie*, they may do OK, although the company will only give them tentative, halfhearted support.

The Publishers

As a major computer game publisher, you maintain an uneasy relationship with Nintendo and Sega, mainly because the two videogame giants hold the monopoly on producing carts for their machines. If someome wants to produce a cart, they have to give the giants a lot of money to make it for them. This means they see less profit on each cartridge and have to put their bets on being able to sell a higher volume. Unfortunately, educationally-oriented titles don't generate that kind of volume, and, to make it worse, they usually sell for less than regular games. Besides, putting the "edutainment" stamp on any entertainment product is the kiss of death. It's a dollars-and-cents decision, in which breaking from the standard formula just doesn't pay. It's a lot different with your disk-based product line. Over the years, you've watched that market mature, moving through arcade games to deep, sophisticated fantasy role-playing games and complex simulations of all kinds. On the cart side, everything's still focused on arcade games, and there aren't any real pressures to change that. (Until recently. More about that later.)

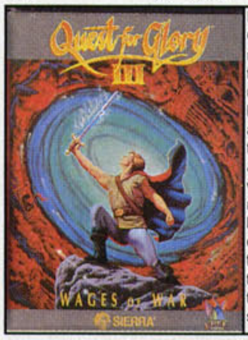
The Manufacturers

There are only two that matter: Nintendo and Sega. As the undisputed leader of the cartridge market, Nintendo has been very careful to maintain an iron grip on everything that goes through its channel. Every game shipped under a Nintendo license is evaluated according to the company's 40-point scoring system and subjected to an intensive technical review. High-scoring products get the full benefit of Nintendo's formidable marketing resources. A lower score means a smaller commitment. Once Nintendo of America approves the product, the entire evaluation is repeated again in Japan. Given the company's eagerness to put the burden of risk on others, they're content to leave the exploring to the above-mentioned pioneers. This caution extends to new game topics, new technologies and new audiences. The few forays into young children's software have relied on blockbuster licenses and, even the *Sesame Street* and *Barbie* games were not noted for their innovation. Furthermore, Nintendo is notoriously inflexible when it comes to negotiating manufacturing prices for its carts: as one publisher put it, "They don't show any

CHIPS & BITS INC GAME SOFTWARE CALL 800 753 GAME

IBM SIMULATION

Aces Pacific Mission 2 $27
Aces over Europe $46
Aces Europe Mission 1 $27
Aces Europe Mission 2 $27
AH 64 Helicopter $46
Air Force Commander $34
Allied Forces Bundle $29
Armor Geddon $29
ATAC $29
ATP $37



B17 Flying Fortress $39
Battle Command $19
Battlefield 2000 $37
Birds of Prey $32
Blue Max:Aces WW 1 $12
Campaign Strat Flight S $37
Car and Driver $38
Cardinal of the Kremlin $27
Carrier Command $12
Conqueror Multi Tank $16
Crash Course $ 6
Design yr own Railroad $29
Dynamics Bundle $39
El Fish $41
Elite Plus $19
Eye of the Storm $29
F117A Nighthawk $42
F14 Tomcat $19
F15 Strike Eagle 2 $19
F15 SE2 Scenario Disk $17
F15 Strike Eagle 3 $44
F19 Stealth Fighter $24
F22 ATF $39
F29 Retaliator $32
Falcon AT $19
Falcon 3.0 $45
Falcon 3 Scenario 1 $22
Fire & Forget 2 $30
Flight of the Intruder $19
Flight Simulator 4.0 $42
Aircraft Scenry Design $35
Flight Planner $24
New Facilities Locator $27
Sound, Graphics Upgrde $27
Fly Grand Canyon 3D $45
Gunboat $33
Gunship $12
Gunship 2000 $39
Gunship 2000 Scenario $24
Harrier Combat Sim $ 6
Heatwave $25
Heros of the 357th $32



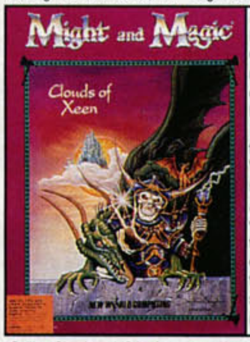
Hoverforce $31
Hunt for Red October $22
Hyperspeed $34
Jet Fighter 2 $39
Jet Fighter 2 Missn Disk $19
Jump Jet $39
Knights of the Sky $29
Land, Sea & Air 1 or 2 $39
LHX Attack Chopper $17
Life & Death 1 or 2 $23
Lightspeed $29

IBM SIMULATION

M1 Tank Platoon $34
Mantis Exprmntl Fghtr $39
Megafortress $26
Megafrtrss Mission 1 $26
Megafrtrss Mission 2 $26
Megafortress 3D Editor $27
Megafortress Mega Pck $38
Miami Enforcer $39
Mig 29 Fulcrum $32
Orbits $37

In **'QUEST FOR GLORY 3'** you must bring peace to the land of Tarna using a balance of loyalty, friendship and honor. Features hand painted & digitized art, video captured animation, multiple solutions depending on abilities, sophisticated conversation & combat systems, and full music support. **$39**

Power Boat Simulator $39
Rapcon $29
Reach for the Skies $31
Red Baron $39
Red Baron Missn 1 or 2 $24
Red Storm Rising $14
Road&Track Grand Prix $37
Sailing Instructor CGA $199
Sailing Simulator CGA $39
East Coast Voyages $39
West Coast Voyages $39
Sailing Instructor VGA $239



Sailing Simulator VGA $42
East Coast Voyages $39
West Coast Voyages $39
Scenery Collectn A or B $37
Secret Weapons Lftwff $44
S Weapons Exp1 P38 $21
S Weapons Exp2 P80 $21
S Weapons Exp3 He162 $21
S Weapons Exp4 Do335 $21
Shuttle $29
Sim Earth 4000 $25
Sim Farm $41

'SIEGE' is a medieval style castle assault game. You are given four castles to attack and defend in a one castle scenario or an extended campaign. Includes historical troops (French, English, Celtic), mythical troops (Elves, Trolls, Giants), siege towers, battering rams, catapults, and oil. **$38**

Sim Life $41
Silent Service 2 $34
Stormovik $15
Strike Aces $19
Strike Commander $45
Stunt Driver $15
Stunt Island $34
Tank $37
Team Yankee $34
Team Yankee 2 $29
Test Drive 2 $30

IBM SIMULATION

Test Drive 2: Collection $29
Test Drive 2: CA Challg $15
Test Drive 2: Euro Chllg $15
Test Drive 2: Muscle Cr $10
Test Drive 2: Supercars $15
Test Drive 3 $29
TD3 Road & Car Disk $19
TFH & BH1942 $44
Thunderhawk $24
Thunderstrike $27
Top Gun Danger Zone $31
Tracon 1 or 2 WIN $34
Tracon 2 $29
Ultrabots $37
Unnatural Selection $32
Vette $29
Virtual Reality Studio $49
Wing Commander 1 $39
WC1 Secret Mssn 1 or 2 $19
Wing Commander 2 $45
WC2 Opertn Mod 1 or 2 $27
WC2 Speach Pack $15
Wolfpack $15
Yeager's Air Combat $38

IBM CD ROM

7th Guest $56
Aesop's Fables $32
Battle Chess DOS/WIN $46
Buzz Aldrin Race Space $59
Capstone Game Collect $45
Conan $24
Cnqst Robin Hood WIN $42
Don Quixote $32
Dune $35
El Grito Del Jaguar WIN $46
Fascination WIN $39
Jones in the Fast Lane $42
King's Quest 5 WIN $42
Legend of Kyrandia $49

In **'MIGHT AND MAGIC: CLOUDS OF XEEN'** you must lead a band of adventurers to bring down the evil Lord Xeen. Features full 256 color VGA support, full screen animation, animated icons to warn of danger, automapping, point & click interface, digitized speech, sound effects, & musical score. **$46**

Lost Treasurs Infocom $46
Mantis Expermtl Fighter $45
Omar Sharif on Bridge $46
Secret of Monkey Island $49
Secret Weapon's Luftwff $59
Shuttle $24
Space Quest 4 $42
Spirit Excalibur $24
Star Child $32
Star Trek 25th Annivrsy $46
Stellar 7 $42
Ultima Bundle $59
Where in World CSD $64
White Horse Child $32
Wing Commandr Bundle $45

IBM CHARACTER EDITORS

Bard's Tale 1-3 Ea $16
Champions of Krynn $16
Curse of Azure Bonds $16
Dark Heart of Uukrul $16
Dark Queen of Krynn $16
Death Knights of Krynn $16
Drakkhen $16
Escape from Hell $16
Eye of Beholder 1 or 2 $16
Fountain of Dreams $16
Hard Nova $16
Keys to Maramon $16
Knights of Legend $16
Lord of the Rings 1 or 2 $16
Magic Candle 1-3 Each $16
Megatraveller 1 or 2 $16
Might & Magic 1-3 Each $16
Planets Edge $16
Pool of Radiance $16
Prophecy of the Shadow $16
Secret of Silver Blades $16
Sentinel Worlds $16
Space Rogue $16

IBM CHARACTER EDITORS

Treasures Savage Frntr $16
Tunnels & Trolls $16
Ultima 4-7 Ea $16
Ultima Martian Dreams $16
Ultima Savage Empire $16
Ultima Underworld $16
Wizardry 4 or 5 $16
Wizardry 1-3 $16
Wizardry Cosmic Forge $16



IBM EDUCATIONAL

Castle of Dr Brain $29
EcoQuest 1 or 2 $34
Island of Dr Brain $29
Jones in the Fast Lane $24
Mario Teaches Typing $24
Mixed Up Faery Tale $29
Mixed Up Mother Goose $34
Quarky Quayso Science $29
Rodney's Funscreen $32
Twisty History $29

MAC SPORTS

4th & Inches $12
Fast Break $30
Hardball 2 $31
Jack Nicklaus Great 18 $27
J Nicklaus CD 1-5 Ea $15
Mean 18 Golf $30
Nascar Challenge $31
PGA Tour Golf $38
PGA Tour Course Disk1 $17
Playmaker Football $32
Tom Landry Football $29
Wayne Gretzky Hockey $36
Weaver Baseball $32

MAC WARGAMES

Americn Civil War Vol 1 $29
Civil War No Grtr Glry $42
Halls of Montezuma $29
Harpoon Scenario Editr $27
Panzer Battles $29
Patton Strikes Back $37
Rommel North Africa $29
UMS 2 $34
UMS 2 Planet Editor $29
V for Victory $38

MAC STRATEGY

Ancient Art of War $29
Ancient Art War at Sea $29



Balance of the Planet $19
Castles $36
Citadel $26
Command HQ $39
Cyber Empire $32
Darwin's Dilemma $32
Genghis Khan $37
Gold of the Americas $29
Go Master 5 $109
Harpoon $39
Harpoon Set 2 or 3 $22

MAC STRATEGY

Harpoon Battle Set 4 $27
Harpoon Challengr Pck $59
Harpoon Chllngr Pck SE $59
Lemmings $29
Mission Starlight $29
Moonbase $29
Operation Combat $15
Railroad Tycoon $45
Reach for the Stars $29
Robo Sport $35

'LEGIONS OF KRELLA' is another in the Star Fleet series of space strategy simulations. You command more than 100 legions of battle hardened Krellan warriors in Battlecruisers, destroyers and troop transports. Features real time combat, state-of-the-art graphics animation and sound. **$38**

Romance 3 Kingdoms $42
Simcity $29
Simcity Graphic 1 or 2 $23
Simcity Terrain Editor $15
Sim Earth $41
Spaceward Ho! $37
Strategic Conquest $37
Uncharted Waters $42
Warlords $29

MAC ADVENTURE

Adventrs Willie Beamish $39
Conquest of Longbow $39
Heart of China $34
Indy Jones Grphc Advtr $32
King's Quest 5 $39
Leisure Suit Lrry1 Color $34
Leisure Suit Larry5 $39
Loom $29
Lost Treasures Infocom $46
Mutant Beach $43
Out of this World $36
Police Quest 3 Color $34
Rise of the Dragon $34
Secret of Monkey Island $38
Sky Shadow $28
Space Quest 3 or 4 $34
Where Europe CSD $30
Where Time CSD $30
Where USA CSD $30
Where World CSD $27

MAC TRADITIONAL

Battle Chess 1 or 2 $29
Bridge 6.0 $29
Bridge 7 $31
Checkmate $36
Chessmaster 2100 $32
Classic 5 $32
Cribbage King Gin King $27
Crossword Magic $32
Go Master 5 $39

In **'DISCOVERY IN THE STEPS OF COLUMBUS'** you explore new worlds, battle pirates, create cities and trade with other countries to further your empire. Features 6 new worlds to discover, land & sea combat, 8 ship types, 4 different maps, 5 competing nations, and a simple point and click interface. **$34**

Hoyle's Book Games 1 $21
Hoyle's Book Games 2 $21
Hoyle's Book Games 3 $29
Ishido $34
Lexicross $32
Monopoly $29
Omar Sharif on Bridge $36
Risk $29
Sargon 5 $32
Scrabble Deluxe $29
Shanghaii 2 $32

MAC TRADITIONAL

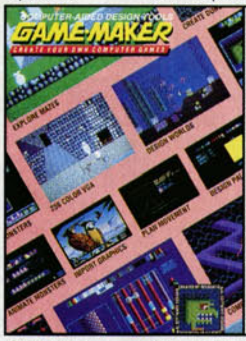
Solitaire Royale $15
Stratego $31
Super Tetris $32
Swap $29
Tetris $24
Wordtris $29

MAC ROLE PLAYING

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Dark Queen of Krynn $38
King's Bounty $15
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Pirates $34
Pools of Darkness $38
Pools of Radiance $32
Secret of Silver Blades $38
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Starflight 1 or 2 $38
Vengeance of Excalibur $29
Windwalker $28
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Wizardry 2 $33
Wizardry Cosmic Forge $37

MAC ARCADE

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Armor Alley $32
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Dragon's Lair $34
Dragon's Lair Color $34
Dragon's Lair 2 $34
Dragon's Lair Esc Singe $34
Faces/Tetris 3 $25
Guy Spy Color $29
Nova 9 Color $21
Oids $25
Pick n Pile $28
Pipe Dream $19
Shufflepuck Cafe $27
Space Ace $34



Space Ace 2 $34
Space Ace 2 Color $34
Starglider $29
Tesserae $32
Thexder 1 $15
Tristan $48
Welltris $24
Xerion $25

MAC SIMULATION

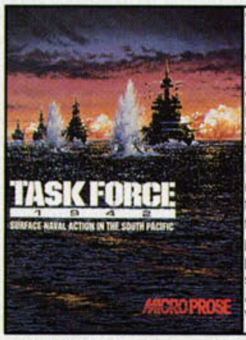
Carrier Command $31
Design your own Train $32
F40 Pursuit Simulator $31
Falcon $34
Falcon AT $37
Falcon Color $46
Grand Prix Circuit $24
Hunt for Red October $21
Life and Death $32
Megafortress $38
Red Baron Color $39
Sands of Fire $32
Sim Ant $35
Sim City Supreme $46
Specter $37
Tank $37
Test Drive 2 $27
Test Drive 2 CA Challng $15
Test Drive 2 Euro Chllg $15
Test Drive 2 Muscle Car $15
Test Drive 2 Supercars $15
Tracon $29
Tracon 2 $34
Vette $33
Yeager's AFT $32

MAC EDUCATIONAL

Castle of Dr Brain $29
Dvorak on Typing $32
EcoQuest 2 Color $34
Rodney's Funscreen $32

AMIGA WARGAMES

Action Stations $29
Action Stations Scenario $14
Afrika Corps $34
Battle Tank Barbarossa $36
Blitzkrieg $29
Blitzkrieg May 1940 $34
Campaign $29
Charge of Light Brigade $34
Civil War No Grtr Glory $42
Conflict Korea $36



Conflict Middle East $36
Dreadnoughts $42
Dreadnoughts Ironclads $29
Dreadnoughts Bismark $29
Fire Brigade $35
Fleet Med $36
Gettysburg Turning Pnt $36
Halls of Montezuma $28
Harpoon $38
Harpoon Battle Set 2 $19
Harpoon Battle Set 3 $19
Harpoon Battle Set 4 $26

'GAME MAKER' allows you to create 256 color VGA adventure and arcade games without programming. Features sound support, multiple levels per game, import images from .GIF files, character & monster animation, scrolling in all directions, add or subtract hit points, lives, score and money. **$68**

Harpoon Challngr Pack $59
Harpoon Chllng Pck SE $59
Harpoon Scenario Editr $27
In harms Way $36
Kampfgruppe $37
Kreigsmarine $36
Kursk Campaign $36
Long Lance $36
Lord of the Rising Sun $30
Lost Patrol $34
Main Battle Tnk C Grmy $36
Main Battle Tnk N Grmy $36



'AIR BUCKS' is your chance to build an airline from the ground up. Starting with $100,000 and a DC3, you must decide which routes to cover, where to locate your hub, which planes to buy. Changing world map, 1 to 4 players, and a point & click interface. **$34**

Malta Storm $36
Moscow Campaign $36
North & South $27
Operation Overlord $36
Operation Spruance $34
Overrun $15
Panzer Battles $29
Patriot $38
Rommel El Alamein $36
Rommel at Gazala $36
Rorke's Drift $34

AMIGA WARGAMES

Second Front $36
Storm Across Europe $12
To the Rhine $36
Typhoon of Steel $15
UMS 2 $34
Wargame Constrctn Set $12
Warhead $34
Waterloo $12
Western Front $37
White Death $29

'TASK FORCE 1942' gives you a chance to command a fleet of destroyers, cruisers, and battleships against aggressive enemy forces in the South Pacific. Features night combat, realistic weather conditions, blinding explosions, flares, torpedoes, ability to send orders to ships & convoys, and VGA graphics. **$39**

AMIGA STRATEGY

Afrika Corps $34
Archipelagos $26
Armada 2525 $39
Bandit King Anct China $37
Battle Isle $32
Beast Busters $24
Big Business $32
Black Gold $28
Breach 1 Scenario Disk $16
Breach 2 $32
Breach 2 Scenario Disk $15
Buzz Aldrin Race Space $36
Castles $36
Castles 2 $36
Centurion Defndr Rome $32
Civilization $39
Covert Action $34
Deuteros $24
Dino Wars $28
Dragon Force $34
Feudal Lords $34
Final Conflict $34
Fireteam 2200 $34
Full Metal Planet $34
Genghis Khan $37
Global Effect $32
Gold of the Americas $28
Imperium $26
Koshan Conspiracy $32
Lemmings $32
Lemmings Datadisk $19
L'Empereur $37
Lost Admiral $34
Medieval Warriors $15
Mega Lo Mania $31
Merchant Colony $34
Millenium $24
Moonbase $29
Navy Moves $27
Nobunaga's Ambition $37
Nuclear War $15
Ogre $19
Omega $34
Operation Combat $15
Overlord $24
Paladin $28
Perfect General $34
Perfect General Scen $23
Populous $32
Populous 2 $38
Populous World Editor $16
Ports of Call $25

Circle Reader Service #55

favoritism — everybody has to pay through the nose equally."

Sega is slightly better. To compete with Nintendo, they've had to be more innovative and more attractive to adults, girls and young kids — those on the fringes of Nintendo's core market. But they still maintain a tight grip on product quality and content, and extract such high prices for cart manufacture that the fledgling edutainment industry is effectively shut out.

The Retailers

As a retailer, you live and die by turnover. Over on aisle 3, where the "real" computer games are, you might keep the same game in stock for, oh, a year or so. At the national level, your chain might sell upwards of 40,000 copies, if it turns into a hit.

On aisle 4, a high-quality kids' learning product usually sells slowly but steadily over a couple of years before you replace it with something else. But on aisles 1 and 2, where the videogames are, the stuff just flies off the shelves. Nationally, an average game cart might sell half a million units in three months flat, then give up its shelf slot to a successor that will perform equally well. It's a jungle out there — one in which Reader Rabbit is going to get chewed to pieces by Sonic the Hedgehog. If you had your way, you'd convert the whole store to videogames.

The Parents

Ever since Atari created the cart market over a decade ago, video game machines have been perceived by Responsible Adults (i.e. parents, grandparents and teachers) strictly as a kids' toy, with no worthwhile content, no educational value, and (beyond the occasional lament over undone homework and wasted Saturdays) no need to take them seriously. Besides, the hardware is an order of magnitude cheaper than true computers. Almost any family can afford one; even families with a tricked-out PC in the study bought them, hoping the thing would keep the kids out of Dad's spreadsheets and Mom's online accounts. Because cart decks have been considered kids' toys from the very start, it didn't really occur to parents that there could be anything educational about them.

Until very recently, there haven't been many factions in the industry inclined to change that perception, which is making it really rough for the few companies who'd like to try. "Nintendo is so incredibly absorbing," sighed a marketer at a major publishing company. "Forget about straight education. It would be great if we could just put that focus to work on developing memory and strategic skills. With the number of machines out there, it would create a remarkable change in the whole next generation of American kids."

A spokeswoman for another large publisher with hopes of enriching the range of kids' offerings on Nintendo said emphatically, "We are absolutely, positively in the position of educating parents about the potential of the cart machines." Both felt that tremendous opportunities have been missed because of the fatal perception of video games as toys, and that teachers and parents need to take the lead in making the machines an integrated part of the learning experience, both at home and at school.

The Kids

The bottom line on videogames is that kids love 'em. The interfaces (designed for the pre- and semi-literate) are incredibly easy to use. The content and pace matches the interest and physical drive of young boys. They're full of emotion and catharsis. *And* kids buy'em. When a parent and kid go into a software store to buy a kids' computer game, it's usually the parent who holds the money and guides the selection. When a parent and kid go to buy a videogame, the kid usually tells the parent exactly what he wants. Or the kid comes in alone, with a pocket full of allowance and birthday money.



Peer pressure is the biggest single factor in explaining the last seven years of Nintendomania. I know quite a few game developers (including cartridge game developers) whose kids have tens of thousands of dollars of state-of-the-art computer equipment at hand, along with easy access to the best kids' software on the market. Given this embarassment of riches, many of these parents flatly refuse to allow a videogame deck into the house and their kids still come home pleading for one because the neighbor kids on both sides, three-quarters of the Cub Scout troop, and everyone in the entire third grade at school has them. No matter how fast your 486 is, you still can't play Super Mario XVII on it. The kids who don't have access to videogames are as culturally isolated as the kids in our own generation whose parents refused to buy a TV.

The Future

All is not lost in the gloom, however. Some small but strong glimmers of hope are beginning to shine through.

Market Saturation — The core of the video game market, those 7-to-14 year-old boys, has been completely saturated, causing a deepening slump in the industry. Faced with a flattening market, developers, publishers and manufacturers have a greater incentive to reach outside that core to adults, girls, and younger kids. **Electronic Arts**' *EA Sports Network* games were one early bid for an older audience. In cahoots with Broderbund, they're following up this year with two *Carmen Sandiego* games on the Sega Genesis and already have a SNES version.

The Age of the 16-Bit Videogame — One publisher recently pointed out at an industry gathering that, disk-based computer games are the computer equivalent of art films. Although they appeal to a much smaller audience than mass-market movies and they won't ever make billions, they're the crucial testing ground on which almost all the artistic and technological breakthroughs are made; breakthroughs that will have a profound influence on the next generation of mass market offerings. Unlike their predecessors, the 16-bit SNES and Genesis decks can handle more complex games with higher production values, enabling them to take better advantage of the advances made in the "real" computer world. With *SimCity*, *Chessmaster*, and a growing list of other popular disk games appearing on SNES and Genesis (and real disk drives purportedly on the horizon for these machines) there's good reason to hope that the quality of video game offerings is about to take a major leap.

The Boomer Factor — The force that's driving the edutainment boom is also putting new pressure on the videogame industry. It's all those 30- and 40 something parents who are demanding high-quality experiences that they can share with their kids. The evolutionary shift that carried disk-based gamers from 32K arcade games to complex RPGs, sports games, and simulations is beginning to cause similar tremors in the videogame channel. While it might seem like deja vu (didn't we just go through this ten years ago?), it may mean that we will finally get videogames that teach kids to do more than twitch. CGW

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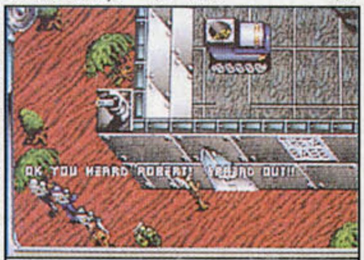


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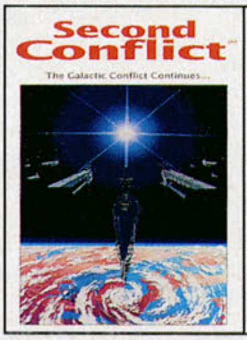


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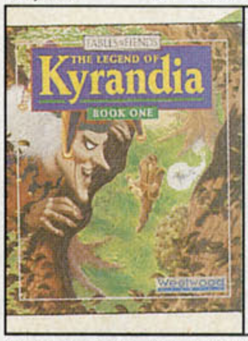
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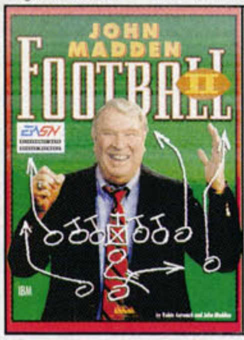
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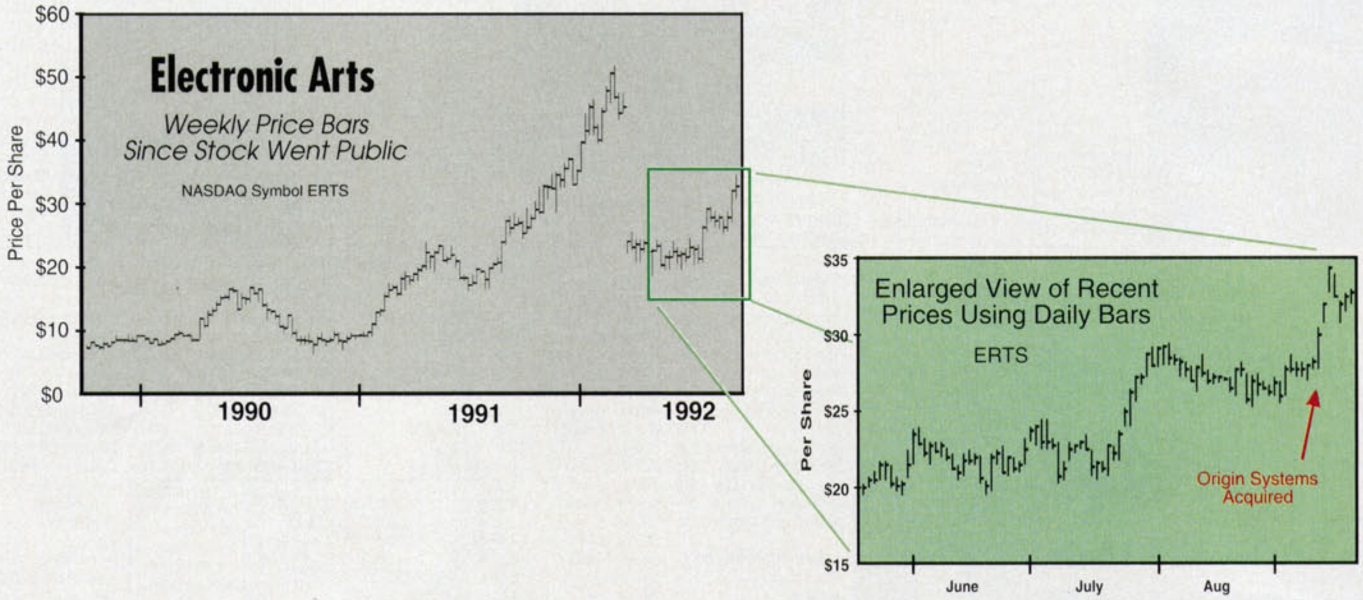
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CGW STOCK WATCH

A monthly look at the Computer Entertainment Stock Market



Electronic Arts: The Quest for the Ultimate Value

In the June issue, we reported on the two-for-one stock split for holders of record (March 16, 1992) of **Electronic Arts** stock (**NASDAQ:ERTS**). On March 27th, a person who owned 100 shares of **ERTS** (selling at a price ca. $45) ended up owning 200 shares at approximately half the original value per share. The hypothetical shareholder still had the same dollar value worth of EA stock, but it represented twice as many shares. So, theoretically, every dollar per share which the "new" stock increased would mean $2.00, in terms of the original investment.

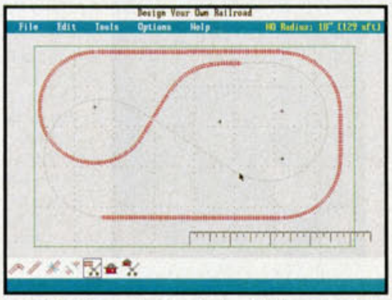
The chart provided in the June issue was already "adjusted" for the split and did not visually depict the split. This chart shows a gap in mid-March which reflects the split activity. Notice that, after the split, the stock drifted slightly downward with the rest of the over the counter market, but moved up solidly in July with continued solid earnings and announcement that the company had signed a multi-year global licensing agreement with **Sega**. The new contract firmed EA's very profitable relationship with Sega and guaranteed that EA would produce software for the Sega CD-ROM drive for the Genesis. This stock movement can be shown in the first wave upward on the inset.

An equally impressive upward spike in share value occurs during the most recent weeks depicted on the chart. EA's purchase of **Origin Systems** of Austin, TX firmed up the company's need for a solid CRPG line (with *Ultima VII* and *Ultima Underworld* both selling impressively) and provided solid polygon-fill technology (from the *Commander* series) to be used with new platforms in the future.

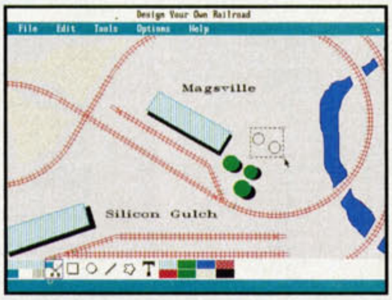
Apparently, the market was impressed with the addition of a $32 million dollar per year subsidiary. Note that the stock jumped upward on the Thursday in which the actual announcement of the acquisition was made and continued upward for two more days before consolidating with the rest of the market and moving upward again. Now, the approximately $4,500 (100 shares at $45 per share) owned by our hypothetical shareholder had increased to circa $6,600 (200 shares at $33 per share), an appreciation of $2,100 total. If ERTS shares had not split, the stock would have had to have appreciated to ca. $66 per share to get an equivalent return on investment. Therefore, this issue's CGW Stock Watch charts present the value of a split for a successful company that is continuing to seek further growth. This is why investors often get excited about a stock split from a growing company. CGW

DESIGN SOFTWARE: More Than A Game. . .

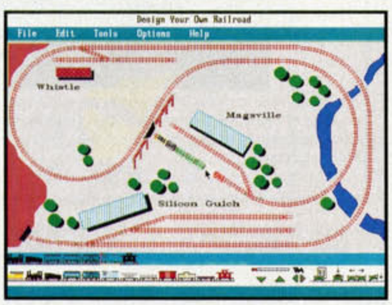
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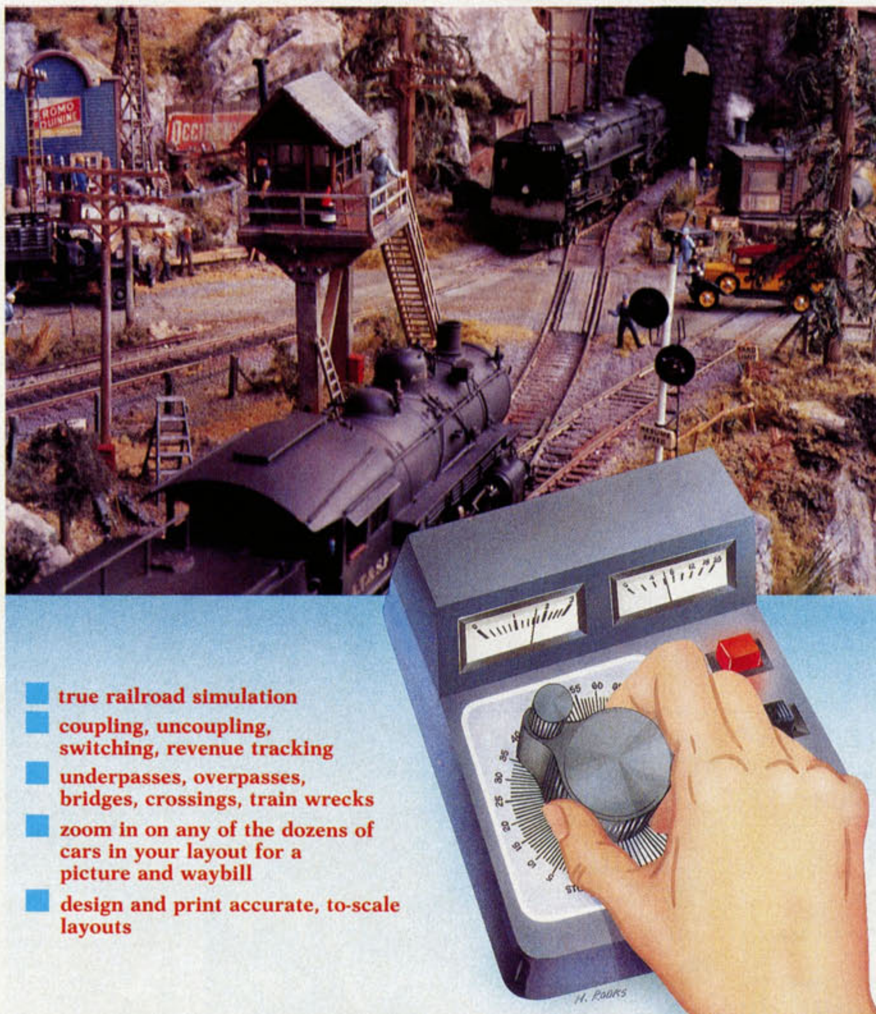
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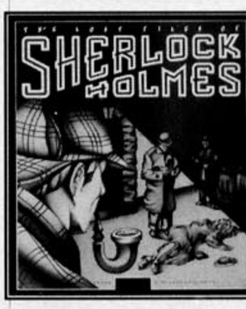
Battle Chess 4000

Yesteryear's time classic now a game for all ages

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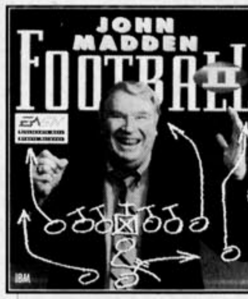
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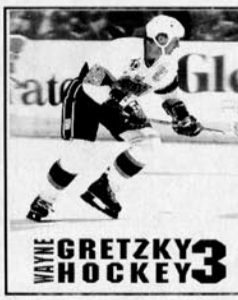
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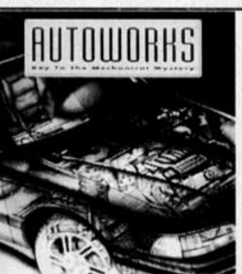
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OF MAGAZINES AND MOTORWAYS

A Sneak Preview of Car & Driver: Ultimate Fantasy Driving Game

by Ken Brown

Sneak Previews are not designed to be reviews. They are feature articles based on "works in progress" that CGW's editors have deemed worthy of early coverage. These articles are not intended to provide the final work on a product, since we expect to publish appropriate review coverage when the game is finished.



Few events in man's evolution have wrought greater impact than the opposable thumb, the automobile, powered flight, microprocessors and Post-It notes. How gratifying, then, that the new *Car & Driver "Ultimate Fantasy Driving Game"* incorporates three out of five, given the advent of a joystick to wrap one's thumb around and drop the hammer on your (presumably) warmed-over microchip.



The very same chip, it should be noted, that regulates fuel injection, now put to good use driving sports cars whose hallowed windows we'd never be privy to smudge, let alone roll down to roar down Monterey Raceway. This fact not having been lost on the folks at *Car & Driver*, has enabled **Electronic Arts** to create a new "ultimate driving experience."

EA, whose oil-free garage has also engineered the benchmark racing simulation *Indianapolis 500: The Simulation* and the more recent *Mario Andretti's Racing Challenge*, has rolled out a smooth-running machine with the new *Car & Driver*. The game offers the decided thrill of jumping into, say, a Porsche 959, putting it on the pavement at, oh, Northern California's Route 1, jamming down the joystick and cavorting with three other 959s in a race along one of the country's most spectacular coasts.

Never in the history of driving sims has there been such a stable of sports cars to dimple one's digits: Corvette ZR1, Eagle Talon TSi, Lamborghini Countach, '66 Shelby Cobra, '57 Ferrari Testarossa, Lotus Esprit Turbo, Ferrari F-40, Toyota MR2, Mercedes C11 IMSA ("1,000 Horses in a Small Sweaty Box," says the sub-title) and the aforementioned Porsche. That's enough *machina exotica* to keep a team of mechanics busy for weeks, bankrupt all the members of one's family combined and power Rhode Island.

Selecting one's dream machine is no more difficult than opening the pages of *Car & Driver* Magazine. Behind the game's opening screen lies an authentic-looking C&D table of contents. Pick a car from the index of feature cars, choose a track, and it's time to grab some gears.

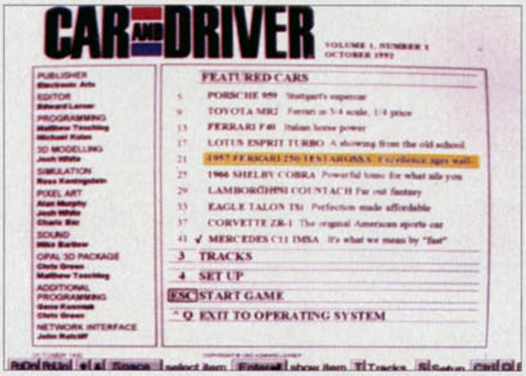
Making Tracks

The tracks truly range from the ridiculous to the sublime, with the exalted ones including the Monterey Raceway, California Route 1, New York Highway 97 and a very challenging EA Speedway which, we'd guess, exists only on disk. The mid-range courses include an oval speedway, a twisty Arkansas Route 7, and a parking lot *cum* Autocross Course. The bottom end of the scale includes the Mahomet Dragstrip, the Dobbs Raceway (allegedly founded by the J.R. "Bob" Dobbs Subgenius Foundation), and the San Dimas Mall parking lot (*sans* Waterloop, of course).

Every start is from a standing stop with a field of three computer-controlled cars identical to the player's (unless one opts to sideline them). In the "easy" mode, the AI cars seemed like weekend warriors, frisky for a good race but not terribly

skilled. In fact, it doesn't seem to take long before a member of the esteemed competition is seen bouncing cross-country atop the handsome poly-filled hillside.

The latter, of course, is exactly what novice drivers do before getting with the zen of the program's controls. Rocketing down the straightaway on the California coast, only to plunge into the sea at a curve, isn't so refreshing after a couple dips. Our sneak preview copy offered a "Return to Road" command (Q), which proved very useful in getting a feel for the wheel.







Becoming a Big Wheel

In fact, an actual wheel was used to test *C&D*, the *Mouse Wheel* (from **Colorado Spectrum**, creators of the *Mouse Yoke*) saddled to a mouse and bolted to the desk top. The wheel looked the part, but couldn't act the role nearly as well as a *CH Flight Stick*. The wheel exaggerates steering input, making it very difficult to control acceleration. EA recommends using a joystick, which provides much more controlled input than the mouse or the arrow keys. Fortunately, this is not the infamous **DSI** joystick routine to be found in *Mario Andretti's Racing Challenge* or *Bill Elliott's NASCAR Challenge*. Ned Lerner has managed to return control to the joystick user, rather than forcing one to depend on the keyboard.

Driving feel in the game has a lot to do with the chariot one chooses. Obviously accelerating in an Eagle Talon TSi will not be as exhilerating as punching a Lamborghini. Cornering improves dramatically with the Porsche and Italian vehicles, as one would expect. One gets a sense of roll in some of the vehicles when cornering, as well as a definite "bounce" when cresting raised sections on the Monterey Raceway and California coast.

Interestingly, cornering characteristics lean only towards understeer, regardless of vehicle. Attempting doughnuts in the San Dimas parking lot in the ZR1 yields only ploughed front ends, not smashed doors or side panels. Okay, that won't adversely affect the driving experience, but what might is the disappointing lack of *speed* one should feel when vaulting up the pavement at 100 mph or more. Judging by the slow pace of road-side objects going by, you'd think that 70 mph readout should be more like 30 mph. This adds to the sense that the driver isn't going very fast, until he or she enters a corner. Inertia then arrives with a vengeance.

Magazine Interface

Deep into the red on the "neato meter," however, is the unique interface which offers an "article" plus layouts and specifications for all the cars and courses. One may easily peruse the vehicles in the on-screen pages rather than flipping through a manual. Real *C&D* wheelmen make real *C&D*-type urbane comments on real *C&D*-style pages. When the driver slides behind the wheel and chooses "dashboard visible" mode, he or she has a realistic rendering of that vehicle's interior (when was the last time you sat in an F-40?). And the race review mode (with several camera angles to view from) shows the driver's run from start to finish, no matter how long the race took.

C&D gets high marks for its beautiful graphics, delicious choice of cars, whimsical and varied tracks, and engrossing simulation. Its level of sophistication may not match Indianapolis 500, but neither does it require winning a number of races or mastering delicate hand controls to enjoy. A comparable, though dated simulation, *Test Drive III* (1990), looks like a child's 8-bit game after driving *C&D*. TD3, after all, offers only three different cars.

Checkered Flag

Finally, no driving game, no matter how recent, can compare to the thrill of driving the "corkscrew" at Monterey Raceway: cresting a small hill, turning left to face what looks to be a sheer drop-off, only to veer right again and plunge down the hill for another sharp left. The view from the driver's seat is so low-profile one must use the road markers to see the course. The best source of information for the driver is the course map in the upper right hand corner. The *C&D* writers will admonish the driver to gather "all the information possible" in order to be more fluid and competitive, and they are certainly right.

Perhaps by paying more attention I wouldn't have plowed head-on into a big rig on the Arkansas state route in a Lotus Esprit Turbo. Being able to do such driving gymnastics, crashing a Lotus and climbing into a Ferrari, is one of the understated delights of this game.

So, since my request for a review copy of an Eagle Talon has been met with steel-belted silence from Chrysler and I lack the few hundred grand to pony up for a wedge of Modena metal, I'll take *Car & Driver* any day. CGW


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Or perhaps you'll have to consult the hint book* for survival tips. But either way, it's going to be a very long day.

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Circle Reader Service #119



Napoleon in the RAW

With regards to your review of *Napoleon I*, in the September '92 issue of *CGW*, please note that the bug found by the reviewer had already been discovered and was corrected shortly after sending out the review copy. It was our mistake not to have informed you earlier that this had occurred. We also found a problem with printing out variables for use in a miniatures boardgame,. This was corrected at the same time.

With the long lead times required for you to review games in a timely manner, we can sometimes have a later version available before your review is published. It is something we will bear in mind for the future. Can I also say that the philosophy of **RAW Entertainment** is that the crime is not in releasing a title with a bug (as long as it is not catastrophic!), but rather not admitting to it/fixing it when you find out it exists. We produce titles that require sophisticated AI routines to produce "human like" opponents and therefore, can expect to have bugs of some sort in most of our titles. (Even though we go to enormous lengths to try to weed them out.) However, we will never ignore them! In this instance, we believe we have lived up to our philosophy.

In closing, can I say that your magazine approaches your reader in the same way we like to approach our customers. That is, you treat them as adults and stimulate debate and argument, where others just pander to the common denominator. Your review of *Napoleon I* was a testimony to the above, and I accept it as an accurate rendition of the product (sans bug!) and indeed, the philosophy behind it. That is, an entertaining, lighterweight wargame designed for the beginner/intermediate wargamer who doesn't necessarily want to play detailed wargames like *Action Stations!* every evening! (Although some do!)

John J. Ingram
President, RAW Entertainment, Inc.

We continue to applaud RAW's efforts to expand the scope of game subjects and to include such nice touches as the miniatures set-up/resolution feature in Napoleon I.

Balancing The Cosmos

In reference to your article in the "Industry News" concerning Omnitrend Software and the "Interlocking Game System" printed in your August issue (#97), I would like to bring to your attention that in 1982, SSI came out with what might be the first interlocking games — *Cosmic Balance* and *Cosmic Balance II*. *Cosmic Balance* handled the tactical combat and ship designs, while the latter handled the strategic combat/world conquering. Both games were designed to be played as stand-alones or could be linked together to form a very involving and complex gaming system. In very early issues, *Computer Gaming World* held ship designing contests, thus enabling readers to pit their custom-designed ships against others for fame and fortune (like subscriptions to your magazine). I am very fond of these early SSI releases and would like to see them receiving their just mention.

Reynold Wong
Pacific Grove, CA

You are right, sir! The major difference between the early SSI releases (1982 and 1983 respectively) and the current Interlocking Game System *is that the former linked two spaceship combat systems while the latter moves between a spaceship combat system (tactical space combat) and a man-to-man combat system (boarding sequences).*

Rational Harpoon Correction

In response to the article about *Harpoon Battle Set 3* in *CGW #94*, I would like to note that the unrealistic emphasis (in all *Harpoon* products and not just *Battle Set 3)* upon air platforms which can carry long range missiles is a fundamental problem. Tim Carter, missed an excellent opportunity to communicate the "Why?" behind this problem to **Three-Sixty.**

The aforementioned problem relates to the air intercept AI. First, the computer does not scramble enough planes to deal with the threats which it faces. If large numbers of missiles/bombers are approaching an air base and the current patrols cannot eliminate them, the choice is to scramble additional aircraft or allow the base and the grounded aircraft to be destroyed. Unfortunately, the computer always seems to choose the latter. Second, the computer likes to launch its missiles in large numbers at extreme range. All that is required of the player is to direct the targeted air-group away from the missiles and increase speed to afterburner and they will outrun the effective radius of the missiles, making the computer's now missile-less interceptors useless. Third, the computer seems to be confused as to what it should do with its interceptors after they have launched their missiles. The planes often simply loiter weaponless, waiting for a missile to remove them as a future threat.

To conclude, I just want to say that this letter is not meant as a condemnation of the *Harpoon* system. It is just that aircraft are a large part of any modern military simulation and, until the computer's management of air resources is improved, *Harpoon* is functioning well below its potential as a simulation of modern combat, naval or otherwise. I simply hope that the people at **Three-Sixty** will take note of these problems and resolve them in the same manner that Sid Meier has changed *Civilization* as problems with his program were brought to his attention.

Stephen Corbett
Aichi, Japan

Your letter is useful and well-reasoned. We hope that it will have the desired results, even though we understand the difficulty of programming the routines for computer opponents. Meanwhile, Harpoon *players can rejoice in the fact that the* **GEnie** *network will offer a multi-player on-line* Harpoon *product in the near future.*

The Most Frequently Asked Question

I'm a lawyer and a programmer, so I'm pretty good at understanding rules. But I've never quite understood how your top games poll works. A while back, you published a statistical analysis of the poll, but it didn't explain the nuts and bolts of how it works. How do you select the games that appear on each month's reader survey cards? How do you weight the total scores depending on the frequency of response? Why do some games appear for months on the chart, even though they are not in the reader survey forms? In other words, what precisely does it mean that on a given month a particular game is 43rd on the chart? I'll bet many readers would appreciate a few paragraphs on this.

Also, I'm an editor of a highly regarded legal newsletter.

The Book Store

CGW Presents . . .



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The SimEarth Bible

by Johnny L. Wilson Osborne-McGraw Hill $14.95

I salute Johnny Wilson for giving us a new kind of book about the earth and the terrestrial planets.
- James Lovelock

The SimEarth Bible is a winning strategy guide to SimEarth, as well as a fact-filled guide to Earth sciences and theories of the balance of life on the planet. Wilson discusses the common mistakes you may be tempted to make and encourages you to examine new approaches to planetary problem solving.

The Official Guide To Sid Meier's Railroad Tycoon

by Russell Sipe COMPUTE Books $12.95 U.S. $16.50

The best book on Railroad Tycoon. If you love Railroad Tycoon get Russell Sipe's book.
- Jerry Pournelle, BYTE Magazine

Sipe's book will add immeasurably to your enjoyment of Railroad Tycoon.
- Neil Shapiro, PC Games Magazine

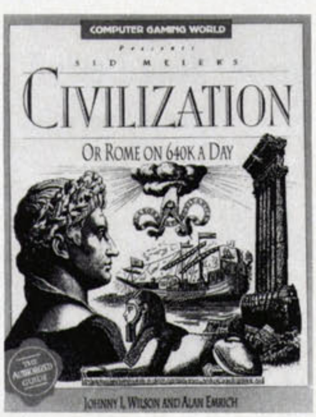
Here are just a few of the things you'll learn: get the answers to puzzling economic forces in the game; learn to defeat each of the tycoons; manupulate the stock market to your advantage; and learn optimal building and survey techniques.

The SimCity PLANNING COMMISSION HANDBOOK

by Johnny L. Wilson Osborne McGraw-Hill $14.95

Each time we read this book we learned something, because it explains the theory behind the game and doesn't just list one-two-three hints.
- START Magazine

Reading the draft for The Sim City Planning Commission Handbook has been quite educational and entertaining for me, but also strangely familiar, as I go through the discovery process once again.
- Will Wright, designer of SimCity



Now Available — *Sid Meier's Civilization or Rome on 640K a Day.* Just $18.95 plus $1.37 tax and $3.50 shipping and handling. The book's more than 375 pages include:

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We regularly report on seminars, meetings and publications in our field, including activities of our competitors (we figure we're so good we really don't have any competition — which I, having looked at many other computer game magazines, think is also true of CGW). I've long wondered why CGW, the premier publication in its field, does not do the same, at least not regularly. If I knew about them, I'd buy many more publications on computer game design, etc. You often report on your experiences at conferences and seminars — but you never announce these meetings beforehand. Computer games are my main hobby, and I'd like to be alerted to new publications and upcoming meetings. If you can't do this, please advise me how to get this information.

Finally, just for the record, I think your fancy new table of contents format is hideous. It's hard to read, and just plain ugly. Sorry. I use CGW as a constant reference tool, believe it or not, and the old table of contents style is much easier to use. To make up for this, you might consider publishing a mini-index on the final quarter page that would list alphabetically all games mentioned in feature articles and letters (not including all the Taking a Peek blurbs and "paiktographies").

Thanks for your attention. Keep up the good work.

Bruce Hake
Silver Spring, MD

The CGW Poll was inaugurated early in our history so that the readers could rate the games instead of the reviewers/editors. The averages are cumulative, built off a database that is updated each rating period. The cumulative database is why there can be titles that stay on the Top 100 chart for months, even if they have not been rated during recent CGW Polls. As for how the games appear on each month's reader survey cards, we try to rate about 40 games per issue. Ten of these games are identical to the top ten in the Top 100 chart for two issues prior (this is because one issue of CGW is at the printer while the readers' cards from the previous issue are still coming in the mail). The rest of the games rated are a combination of new games which we believe have actually hit the shelves and games that are tied with other games farther down the Top 100 chart.

When readers rate the games, each letter grade is converted to a number. The article which you read before was an analysis of the new system using letter grades converted into numerical values as opposed to numerical values factored such that it was perfectly obvious to the readers what the numerical scale actually was. The statistical psychologist believed that not specifying the numerical values kept the ratings from skewing to the middle. As the years have progressed since that change, you will have noticed a slight rating inflation throughout the Top 100. Readers seem to look at the current chart and elect to give more A pluses than they used to give to games.

We have an in-house program that collates the raw data, determines if the number of responses are significant (the only specific weighting for frequency of response), creates a cumulative numerical rating, updates our database and prints out the Top 100 of statistically significant ratings. Whenever games attain Hall of Fame status, they are removed from the cumulative database. So, on a given month, a game that is 43rd on the chart means that it is 43rd among all the statistically significant ratings in the database that, with the exception of Hall of Fame games, has been accumulating since we changed the ratings system to a grade scale, approximately four years ago. If a game is listed on the CGW Poll card and does not appear on the Top 100, it means that we either received insufficient responses to integrate it into our data or it rated below #100 on the cumulative scale. We hope this clarifies your question. We do not claim that our system is without occasional contamination, but we do believe it is the best numerical indicator of computer game ratings available.

As for the seminars, we should let you know that the Computer Game Developers Conference is scheduled for April 17-20, 1993. It will be held in Santa Clara, California and prospective attendees need to write to: ***Computer Game Developers Conference, 5339 Prospect Road #289, San Jose, CA 95129-5020*** *for more information. Most of the other conferences which we attend are not open to the general public. One glaring exception, of course, was the Summer Consumer Electronics Show which was advertised in our pages. The backgrounds on the table of contents pages were an attempt to spice up the look of the magazine. We emphatically deny that we are engaged in a conspiracy with an ophthalmic group in an attempt to force all our readers to buy glasses. Microfiche readers, maybe, but not glasses.*

Wooden Ships and 9-Pin Adapters

Is any publisher planning a simulation based upon wooden ships? A computer game simulating the battles of Admiral Nelson or the naval wars of 1812 would prove to be an interesting topic.

D.F.
Oceanside, NY

On the IBM, there is only the Ancient Art of War at Sea *from Broderbund, an action-oriented game covering the era. Apple II owners could remove the dust from their boxes of* High Seas, *an out-of-print strategy game from now-defunct Garde' games, while Atari 8-bit owners could do the same with* Broadsides, *an out-of-print strategy game from SSI. C-64 owners might want to bring their units out of mothballs in order to play* Wooden Ships & Iron Men *from Avalon Hill. It is an adaptation of the boardgame classic which, in turn, is similar to Gygax and Arneson's original* Don't Give Up The Ship *miniatures rules for Napoleonic sailing games. We are hopeful that Simulations Canada's* Man of War *(working title) will offer an exciting challenge for fighting sail aficionados with IBM compatibles.*

Why Not The Rumor "Bag Lady?"

Bring back the rumor guy, you know, the one under the bag.

Sam J. Pennington
Guthrie, OK

Don't look now, Sam, but heeeee's back!

Ryans' Toasts

Great magazine! Keep up the early previews.

Ryan Reinike
Ocean Springs, MS

As a new subscriber, I am impressed by your high-quality magazine. I use it as a guide when shopping for new games. I would like to let you know that I agree 100% with Johnny L. Wilson on his latest editorials on violence in computer games. Keep up the good work!

Ryan Akiyama
Tacoma, WA

Well, you didn't think I was going to hesitate printing those did you? Anytime anyone agrees 100% with me, I'm going to expose him for the psycho he is (big grin). CGW

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COMPUTER WARGAMING WORLD

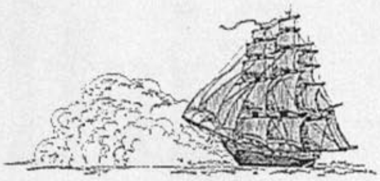
" I Came, I Played, I Conquered"

Computer Wargaming World

Broadsides & Gripeshot

Modern Gaming Telecommunity

by Alan Emrich



It is well known that the editorial stance of *Computer Gaming World* is highly "pro connectivity." We embrace computer modems, networks and modem/play-by-email gaming at every opportunity. What we're excited to see is that this is a trend which is growing in our computer gaming community. As the "installed user base" (a little marketing lingo, there) of modem gamers increases, more opponents become available. Through the networks, players have been meeting each other and setting up computer gaming challenges against each other — making friends and having a lot of fun in the process.

As I observed during a recent panel discussion on computer games, "I have friends I've never seen." One of our writers expressed something of the same sentiment when he told me he was having a tremendously difficult time in communicating to his wife that he was talking/typing to other *people* when he played a multi-player online game. We expect this phenomenon to continue to expand as computing penetrates the home market more fully.

Some software publishers have refused to incorporate modem features into their current lines of releases because their demographics (the numbers they've collected from the registration cards on old products) do not indicate that more than a couple of thousand gamers per product were influenced toward their purchase by the connectability of their games. Yet, we contend that there are tens of thousands of modems that have been appearing in homes and believe that connectivity will become progressively more important as this market penetration (marketing slang for the number of potential customers) continues.

The good news that has us smiling relates to the number of releases on the horizon. Modem gamers are bound to be excited over such possibilities as *Empire Deluxe* from **New World Computing**, a six-player version of the original *Empire*, which will include full modem, network (Netbios) and play-by-email features. For players who have long been playing this game through a jury-rigged system of file transfers, a brighter day is ahead.

Novell network gamers will be particularly pleased to know that **New World** also plans to publish *Spaceward, Ho!*. Originally designed by **Delta Tao** for the Macintosh, will be coming out for both MS-DOS and Windows and promises to be a modem/network/e-mail gamer's delight. *Spaceward, Ho!* is easy-to-learn, fast-to-play and easily tracked. A new contender, *Pax Imperia* has just delivered an alpha version to our office and presented us with a game of amazing depth and a very intuitive interface. *Pax Imperia* manages up to 16 players over a network and/or through modems (in real time). Alternately, players can "hot seat it" in front of a single computer.

Computer pilots will not be forgotten, either. Players who have been enjoying the likes of *Red Baron* on **The Sierra Network**, **Kesmai**'s *Air Warrior* in SVGA graphics on the **GEnie** network, or the point-to-point combat simulations (like **MicroProse**' *Knights of the Sky*, **Electronic Arts**' *F-16 Combat Pilot* and **Spectrum HoloByte**'s *Falcon 3.0*) will be glad to hear that the third incarnation of **MicroProse**'s *F-15 Strike Eagle III* will feature modem play (though not the connectivity to *Falcon 3.0* that several members of both design teams had allegedly hoped for). **Spectrum HoloByte** plans to be back in the modem ether with *A-10 Warthog* by this time next year. *A-10 Warthog* is being designed to fit into their "Electronic Battlefield System" of connective games.

"Kings" of strategy gaming will enjoy **Mindcraft**'s *Seige* (expected to have a modem play feature in an upcoming enhancement) and the first "expansion" disk for **Interplay**'s *Castles 2* (also expected to support modem play). In addition, **QQP**'s next strategy game, *Conquered Kingdoms* is a turn-based strategy game in the best **QQP** tradition that will support both modem and specific play-by-email features.

After their recent foray into modem gaming with *Theatre of War*, **Three-Sixty Pacific** is planning to follow up along that line, so don't hang up that modem yet! The second chapter in their *V For Victory* series, *Velikiye Luki* (due out before Christmas) will feature modem play for its turn-based system. Next year's projects, which include *Victory At Sea* (the Jim Dunnigan design implemented by Dave Menconi) and *Harpoon II*, both tentatively slated to include modem play.

The many enthusiastic fans of the popular "out of nowhere" strategic WWII computer wargame *High Command* read in the designer's notes about a pending 2.0 version which promises to feature modem play and is scheduled for 1993. For those who can't wait, **Columbia Games**, the boardgame publisher, has released their *Computer EastFront*, a Windows version of their popular board game. Although it has no AI, the game was specifically built abound play-by-modem and play-by-email features. While it is anyone's guess how such a game will fare in the marketplace, we salute the attempt to translate an excellent board wargame to a broader base of computer gamers.

Thus, with all the promises from various publishers, it is time for modem strategy gamers to get a separate phone book and start listing their gaming buddies there. CGW



"A LANDMARK IN COMPUTER WARGAMING"

Computer Gaming World

JUNE 7, 1944



"As can be expected, sound and graphics are superb." -COMPUTER GAMING WORLD

"By far one of the most graphically pleasing and downright beautiful games ever designed." -STRATEGY PLUS

"Near-fanatical attention to historical accuracy." -COMPUTER GAME REVIEW

"Particularly noteworthy is the quality of the computer Artificial Intelligence (AI) routines used to control the computer opponents. As either the American or German, the computer presents a tough, competent foe." -CGW

"VFV has set a new standard for computer wargaming in terms of detail and programming." -SP

"While taking full advantage of the computer format, it preserves the tactile feel of classic board wargaming." -CGW

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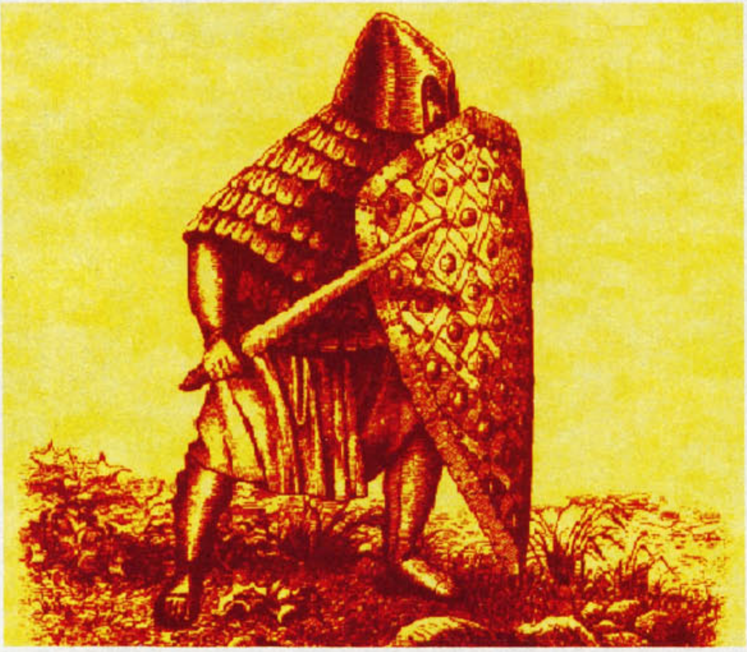
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Circle Reader Service #41

Opening the Anglo/Franco Files on the "Hundred Years War"

Three Viewpoints on the On-Line Multi-Player Wargame

by Ken St. Andre, David Wilson, and Johnny Wilson



The so-called Hundred Years War lasted, of course, longer than one hundred years. A wag might conclude that the sum of its years was greater than that of its title. The same might be said for **GEnie**'s *Hundred Years War*, a multi-player game of diplomacy, economics and warfare by Jim Dunnigan, Dan Masterson and Al Nofi. A beta test version of *HYW* is available for anyone to join on **GEnie**'s page 945 for $6.00 per hour. In order to give *CGW* readers a taste of our impressions of this fascinating cyburb, we have elected to publish the thoughts of three gamers: a boardgame designer with some computer game credits; an editor who has been writing about computer games for more than a decade; and a gamer who is new to multi-player on-line games.

The Designer (Ken St. Andre)

James Dunnigan's *Hundred Years War* was originally designed as a play-by-mail game for **SPI** — a humongous sort of wargame to keep huge numbers of players busy for years as they strove to enrich their families and defend their nation. Each player takes the part of a European noble (mostly French or English, but with some Italians, Spanish, and Germans, etc.), and then, tries to increase his/her power and wealth while the great lords — the Kings of England and France — seek to embroil him/her in the greater power struggle between France and England that lasted from 1337 until 1453. How well the player succeeds depends on tactical and logistical brilliance, but also on diplomacy, luck, and stubborn adherence to one's goals.

As an on-line computer game, *Hundred Years War* (*HYW*) is the most ambitious game design I've ever seen. *HYW* combines several genres of combat game into one overwhelming experience. (And when they finally get the graphic front end in place some time in 1993, it should be truly overwhelming.) First, it is an enormous historical simulation, but it is also a multi-player diplomacy tournament, a long-range resource management game, a tactical combat game for marauding armies, a role-playing game with numeric character attributes and skills that affect how well one's alter-ego can accomplish his/her goals, and a writing game where one attempts to dazzle both friend and foe with witty contributions to the on-going chronicle of the war.

It has been my pleasure and privilege to participate in both the alpha and beta testing of *HYW*. Over the last several months, I've seen the game/simulation grow in complexity and rectitude. I've enjoyed playing *HYW*. It can be totally absorbing if one has any feel for the High Middle Ages and either role-playing or war-gaming. (I was excommunicated twice and tried to transplant the Islamic faith to Holland during the alpha test!)

Having said all that, I want to add that as a sometime game designer myself (*Tunnels and Trolls*, *Stormbringer* and *Wasteland*) and a game player, I'm not entirely happy with the way *Hundred Years War* is developing. From a design perspective, I would almost have to call the current game *too ambitious*. In simulating the High Middle Ages, Dunnigan and company have gone too far and made the whole game/simulation too complex. Each day of real-time (outside the game) represents 90 days of game time. During each game turn

one can: (1) manage one's properties, (2) conduct family business such as getting married, or trying to get the wife (or self) pregnant, (3) give orders to NPCs that will send them on journeys or make them into kidnappers, assassins, bailiffs, etc, (3) travel by land or sea, (4) recruit armies in any of three different ways, (5) visit courts where one can hire or attempt to seduce NPCs, (6) conduct battles, either army to army or army to castle, (7) enter into a simple hunting simulation, (8) try to get wealthy in one of four different gambling games, (9) communicate with other players through a message function online, or (10) visit the interactive court where one can talk, drink, brawl, or duel with the other gameplayers in what passes for real-time. Further, even though I've listed ten things to do, I've left some of the lesser things out and haven't even mentioned the non-gaming time when one would be trying to participate in the neverending flow of messages posted on the game's bulletin board. Moving from menu to menu as rapidly as GEnie will let me, it usually takes me at least two hours and sometimes, as long as four to finish one 90 day turn to my own satisfaction. How many people can afford between $12 and $24 a day to play a game that may last for over 400 turns? Of course, one doesn't *have* to play every day, and one *can't* — vacations, illness, computer problems, a thousand things might keep one off-line sometimes, but missing a day can sometimes be disastrous. (My character Guillaume de Granson was kidnapped from the Scottish Court and tortured to death, because bad weather in Phoenix kept me from being online one night.)

HYW can be a lot of fun, but because there are so many things one *must* do — many of which, such as recruiting NPCs or managing fiefs which are pure drudgework, there is also a boredom factor involved in playing and the boring stuff is costing the gamer as much as the interesting stuff. I really believe that if Dunnigan doesn't simplify the game, it will turn into the Hundred Years Bore.

My other concerns are myriad. First, there is an overabundance of mostly meaningless numbers that appear in the description of every fief and character. What does "Fields 4.68, Industry 0.00, Weather 0.98" really tell you when looking at the description of a fief? How can one measure weather on a 0.00 to 1.00 scale anyway? Second, it often seems that Dunnigan assumes a double standard that probably arises from confusion as to whether he's designing a simulation or a game. (Yes, there is a difference — a simulation merely models a process while a game imposes artificial rules and goals upon one or more processes.) When players complain about something that doesn't seem fair, Dunnigan's tendency has been not to fix the inequity, but to explain why he put it into the game. The answer he likes best is "Because that's the way it was in the 14th century." Such reasoning is fine for enhancing the reality of the simulation, but pretty lame for a gamer who finds artificial constraints hampering his style of play and chance of succeeding. At other times, Dunnigan ignores the most unrealistic results because his gaming system (largely built on random number generators) gives or requires them. A good example is money. Although every country in Europe had its own distinct currency by 1337, the only monetary unit in the game is the kiloducat (1000 ducats). That's an easy way to handle the problem of money in a game, but wildly unrealistic for the simulation. An old (1960) Webster's dictionary that I have defines a ducat as a small gold coin worth between $0.83 and $2.32. Modern dictionaries refuse to give a cash equivalent for the coin. Today's value would be at least five times as high, so figure roughly between $4 and $12 per ducat in 1992 U.S. money which makes a kiloducat worth $4000 to $12,000 dollars. To hire one soldier for 90 days costs 1 kiloducat or $8000 if we average it, any soldier whether mounted knight or lowly footslogger. Can you believe that any lord of medieval France paid his foot soldiers the equivalent of $32,000 a year? In the game, even poor nobles have thousands of kiloducats to throw around, so we never even stop to think about how much money Dunnigan has us spending in order to fight our wars or pay our taxes.

I could give many more examples of such double-sided thinking, but the fact is that as a simulation, *HYW* is too simple and as a game, it is too complicated.

> **My Lives during the Hundred Years War**
>
> *by Ken St. Andre (a.k.a. Robert de Granson)*
>
> In days of old when knights were bold,
> And 'puters weren't invented,
> They fought and died with manly pride—
> They sinned and then repented.
>
> A hundred years of hopes and fears,
> Of sword and spear and meinies,
> Of siege and slaughter, prince and rotter,
> Yours in the realm of GEnie.
>
> James Dunnigan seeks fun again
> With massive simulation.
> Have you the force to stay the course
> That shaped the Gallic nation?

The Player (David M. Wilson)

There are multitudes of fascinating elements that draw the player to *HYW*. For me, there was the strain of trying to build a kingdom of my own, while trying to defend my homeland against the onslaughts and land piracy of the much despised enemy. There was the thrill of raising an army and attacking a fellow noble's fief (followed, of course, by experiencing the agony of watching the same noble, more powerful than myself, crush me beneath her unmerciful bootheel). There was the pleasure of striving for diplomatic resolutions to problems, as well as negotiating for reparations when another Lord had wronged me. I also discovered the sadness of losing a child at birth, a gamestyle microcosm of seeing one's hope for immortality disappear.

HYW allows a noble to begin with a number of fiefs, the responsibility for which can be immense. These fiefs make up the main source of revenue for the noble. Managing a fief consists of setting the payroll for officials and garrison, extending fortifications, increasing the infrastructure and deciding how much to tax the peasants. Should a noble fail to pay proper attention to such matters, he may find himself muttering the cliched Mel Brooks line "The Peasants are revolting!" ("You said it, they stink!") The noble could very well be forced to raise an army, rush to the rebellious fief and crush the rebellion.

Unfortunately, as in real life, rebellions of this type can occur at the worst possible times. The worst possible time being, by definition, those periods when a player is seeking to do something important, such as battling invaders from an enemy nation. Since the game itself is realistic enough that a great deal of playing time is spent waiting for one's enemies to actually make a move, it can be particularly frustrating to be forced to put down a rebellion just as the first wave of invaders begins its attack. Such is the penalty for bad management. Bet you wonder how I know that.

As noted earlier, each real-time day is equal to 90 game days and each activity costs a certain amount of game

days. For example, attempting to conceive an heir takes 10 game days. Sometimes, one wishes there was a medieval fertility specialist around to proffer the right herb or advice. Naturally, the importance of having an heir becomes obvious when one realizes that a player's noble can die at any time. More than one noble has discovered how prevalent disease was in medieval France and how suddenly it can take one's life. The far-sighted player who took the time to ensure himself/herself of an heir can assume the role of that heir and continue in the game.

HYW may also have to take some responsibility if I am forced to join Gambler's Anonymous, for I find myself constantly taking risks to prove my system. I can remember being up 5000 kd (kiloducats) one evening by gambling on the Sport of Kings (horse racing). It wasn't long until I was 5000 kd behind and had to force myself to quit. It is amazing what a person can learn about himself in front of a computer terminal.

In addition, the role-playing elements of this game are quite fascinating. The Private Roundtables set up for nobles of their own respective court (on the game's bulletin board) literally bristles with discussions of on-going events within the game. Players find themselves negotiating, informing, discussing, arguing and generally communicating from the viewpoint of their character. Even when involved in a quarrel the player is expected to remain in character and respond only as his/her character would respond.

The online message system further facilitates the role-playing aspects of the game. Even in the midst of making his/her moves, a player is able to send and receive messages (one line at a time). In this manner, alliances may be created/cemented, resources may be consolidated between players, military operations may be coordinated, enemies may be chided/insulted, or players can simply greet one another. The aspect of today's computer role-playing games that is lacking the most is player interaction with other characters. *HYW* delivers a satisfying role-playing game to those who are seeking RPG fulfillment.

This role-playing portion of the game became personally distasteful for a time during my initial gameplay experiences. The person playing the French king did not take his royal duties seriously (much like the historical Valois King). This created a real problem for those of us who were waiting for a decision from the king. I waited for two weeks for a response and was quite irritated that when he did respond, he e-mailed the wrong player. I was counseled by many to relax, as this was realistic role-playing because it fit the historical facts and setting. I made sure that there was no doubt in any player's mind that I was extremely upset about the turn of events (too sure!). I even threatened to assassinate the king.

This leads us to another important issue, not often addressed. Players must carefully word messages and responses to other players. It is easily forgotten that the printed word has no tone of voice or facial expression to assist in proper communication. People often will discover that they lack the inhibitions that keep them polite in a face-to-face conversation when they are communicating across a modem connection. Let's just say that unrestrained communication will *not* benefit the player in *HYW,* since much of the game relies on diplomacy.

As for the entertaining surprises that occur with human opponents, I must confess that even the best laid plans of mice and men can go astray. I had the amusing situation of taunting the king of England into leaving a keep without

an army. I had no kidnappers or assassins who spoke the proper language to kidnap him while his guard was down. So, he challenged me to give him a minimal force so he could defeat me handily in pitched battle. I transferred 50 men to his control and faced him with more than 300. Imagine my surprise when he not only won the battle, but killed my main nobie character. As stated previously, it is *imperative* that a noble have heirs.

I have found myself totally immersed in the game. While I had been asked to play for 20-30 minutes per day, at most, for the purpose of this article, I found myself dawdling online for hours, often not moving or accomplishing anything, but merely discussing strategy and tactics with others. After I played for 30 hours in the first week, my wife stormed into my office and demanded to know what I was doing that took so much time. I told her that I was talking to others within the game. She wondered aloud how I could spend so much time talking to imaginary people in my computer when I had a wife and two kids in the same house with me. I laughed as I tried to explain that people all over the country were on-line and playing right that very moment, and these people were *real*. I had the pleasure of meeting some of those people at GenCon and I can assure you that they are real enough. To sum up my experience in the game, the people were the element that made the game fulfilling and interesting for me. What can I say, I'm a people person!

The Critic (Johnny L. Wilson)

As the dean of analytical history (the best description I can provide of Jim Dunnigan's prolific contribution and importance to the hobby which continues to enthrall me, i.e. wargaming in all its permutations), Dunnigan well knows the difficulties involved in translating history to a living experience and stimulating challenge. At *CGW*, we use the term "grognard" to describe those of us who are willing to dig into and assimilate a wide variety of information on a subject in order to get the most out of a wargame. I believe that Dunnigan designed *Hundred Years War* with the "grognard" in mind. The time period is not that which would engage the mainstream of gamers (indeed, even many wargamers of my acquaintance think anything before World War II is totally uninteresting) and it is based on a series of conflicts which were largely mismanaged in the first place. Yet, out of the midst of that historical chaos, comes a game.

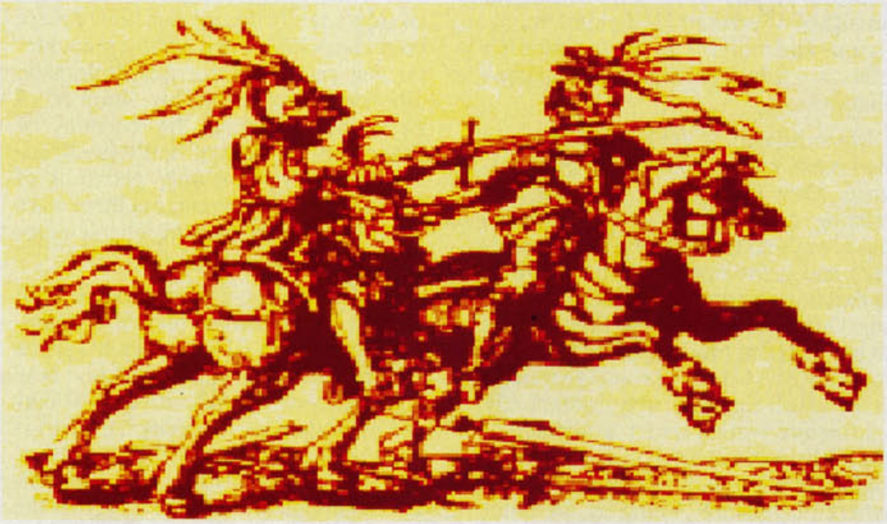
HYW is a game because it has no certain outcome. It is analytical history because it pits a roughly historical amalgam of economic, diplomatic, religious and military forces against each other in a simulated time period of conflict.

My criticism of *HYW* as a game is that it has some problems in play balance. One reason that **Kesmai**, the leading developer of on-line games, has always resisted having human referees and game masters in their games is that humans are unreliable. One reason Dunnigan wanted the French king to be picked at random is because, historically, the Valois line was so indecisive. He thought the potentially ineffective French leader would add to the realism. As analytical history, he is right. As a game, particularly a game where players are paying by the hour, where everyone wants a reasonable (if not equivalent) chance of winning, this is a poor design decision. I believe the French should select their king among, at least, experienced players prior to the beginning of actual game play. At the very least, I think any king that is inactive for over a week of real-time should experience an untimely death and the throne be passed to another player.

Another weakness as a game may be found in the way stature is handled. Stature appears to be a significant factor in the success algorithms. Yet, I couldn't really figure out how stature could be raised. Even when my character was making numerous diplomatic alliances, increasing his number of fiefs and defeating the enemies of France on the field of battle (well, admittedly they were only garrisons of the fiefs I was pillaging, but there were victories nonetheless), my character remained at a stature of 1.0.

Finally, though I cannot agree with Ken St. Andre on the matter of monetary abstraction (if he thinks the game is complicated now, just imagine how it would be with crude auctions at border marketplaces for foreign exchange and having to deal with all sorts of traveling moneychangers), I am concerned about the lack of utility in the numerical characteristics for each character. Some characters have numerical values for useful characteristics; others have numerical values that never come into play. One of my daughters, for example, is a glutton, but we've never had to find a medieval equivalent of Weight Watchers for her. There is no

weight measurement in the game. Another daughter is extremely disliked by the clergy (guess she takes after her old man), but it didn't stop the Pope from blessing her marriage.



Dunnigan's answer is that it rounds out the characters, particularly the non-player characters, by letting one see at a glance what they are like. To some extent, I agree. If all the characteristics don't matter, however, there ought to be some way for every character to have, at least, one or two characteristics that do matter. It's a matter of playability and perception.

All of these criticisms aside, gamers are to be reminded that *Hundred Years War* is a work in progress. It is still evolving all the time (we're currently working out a glitch in the parliamentary system and tournaments are just about to go live). It is a different game than when we started and the best news is that, even when it is complete, it will be a different game every time it's played. That's the way human opponents are.

Hundred Years War has seduced this critic into historical research, many extra hours of correspondence and plenty of map study. I've spent dozens of hours talking over the events of the games with other people, both those involved in the game and those who are not. I've adjusted my personal goals in connection with changes in the influence stream among the players and done my share of helping other players who had experienced bad breaks. I've rethought the historical situation and replayed possibilities in my mind. I've learned the lessons of history in subjective new ways that reinforce what little I know objectively about the period. In short, the dean of analytical history is holding class. Matriculation is as easy as logging onto GEnie. Finishing the course can be as rewarding or unrewarding as the "students" want it to be. **CGW**





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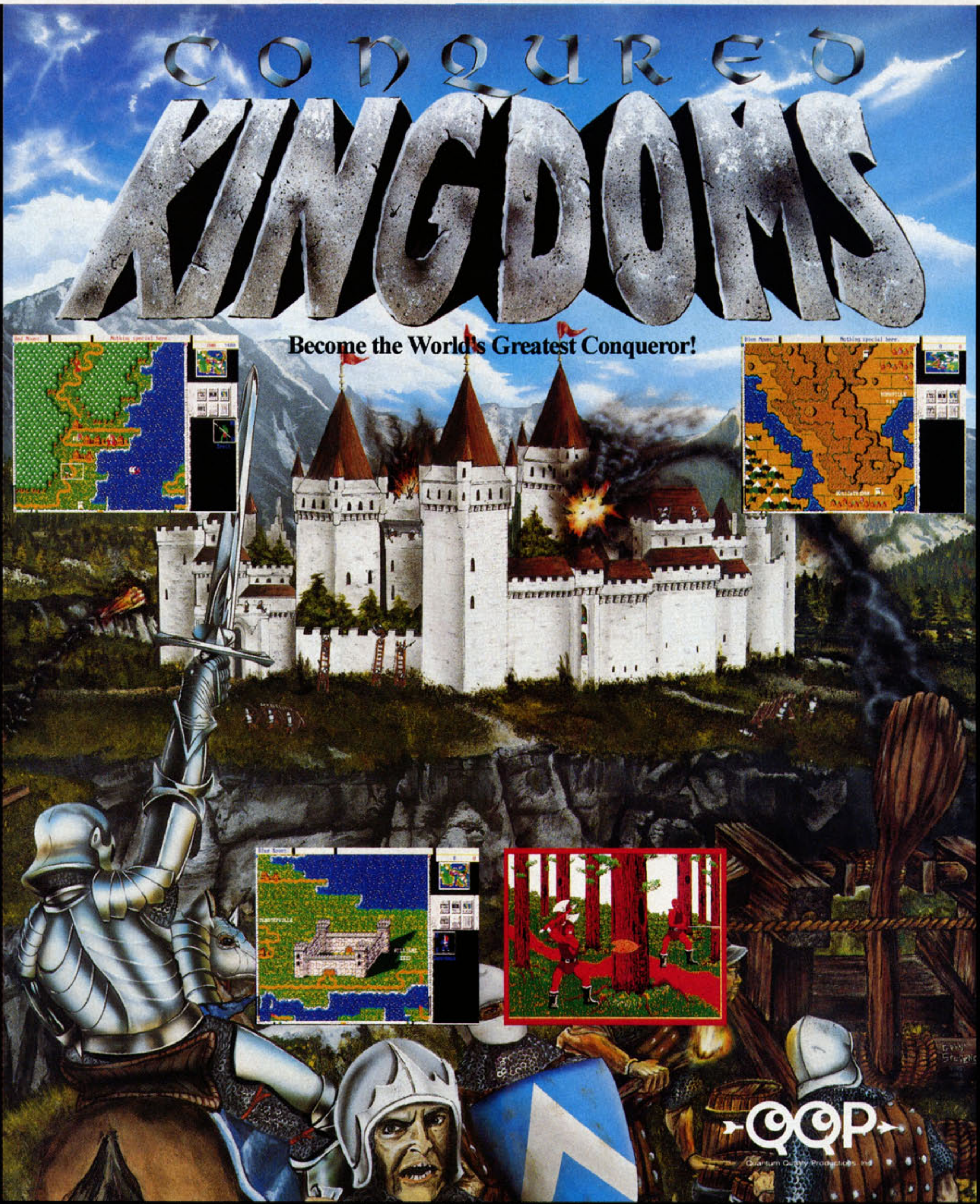
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When E-mail Became A Diplomatic Pouch

Historical Reflections and Future Invitations on PBEM

by Ken Hill



Back in the early 1960s, some old college friends who had moved to different parts of the country decided to try playing one of their favorite board games, *Diplomacy*, using the mail. Because the game required intense negotiations between players and did not rely on random factors like die rolls to determine results, it was highly suited for being played via written messages. One of the players volunteered to organize and run the game and the Play-by-Mail gaming hobby was born.

In 1982, Russell Sipe decided that the fledgling commercial computer networks had the potential to run *Diplomacy* games using the new "electronic mail" technology more efficiently and quickly than the PBM system. Sipe started a handful of games on both **CompuServe**'s Gamers Forum and on the now-defunct **Source** and created his *Diplomacy* "zine," *The Armchair Diplomat* (*TAD*). The Play-by-Electronic-Mail gaming era had begun.

Today, a dedicated band of gamers play a wide variety of traditional board games via electronic mail in **CompuServe**'s PBMGAMES Forum. By far the most popular of these games is *Diplomacy*. Published in the U.S. by **Avalon Hill**, it is still the board game that is most widely played by mail. The game attempts to recreate the situation in Europe before the start of World War I.

It requires seven players, each of which represents one of the "Great Powers" (Austria, England, France, Germany, Italy, Russia or Turkey). To win the game, a single player must control 18 of 34 "supply centers." In most cases, the player must negotiate and make agreements with other players in order to succeed. Each player, of course, has his or her own agenda and deals must be made with shrewd tact or — diplomacy!

In combat, nothing is left to chance. If two units attack a single unit, the single unit is defeated and must retreat to another space on the board (if possible). Every other turn, the players must adjust their forces to match the number of units they control to the number of supply centers they hold. If a player holds more supply centers than units, he or she may build new units. However, if the player controls fewer supply centers than units, he or she must remove units from the board until the numbers are equal. It is a classic game which has been played for more than 30 years.

In the PBMGAMES Forum Diplomacy section, players can send private messages to each other or send out general messages (usually called "Press") related to the games. Each game has a volunteer GM who oversees the action and adjudicates the turn results. Orders are submitted to the GM on a regular schedule, usually every two weeks. The GM then forwards the results for each to the editor of *TAD* so that game results can be published. Every Tuesday, *TAD* is available in the Forum's data library for the players to read or download.

Usually, there are a dozen or more Diplomacy games active at any time in PBMGAMES. The average game takes around six to nine months to complete.

A player in an on-line *Diplomacy* game can spend roughly an hour a week conducting written negotiations, preparing orders and reading the game reports. Players are encouraged to play in more than one game if they like, and many participate in several games at once.

Players can also try out several Diplomacy variants. These games are run in the sister publication to *TAD*, *The Eccentric Diplomat* (*TED*). Among the most popular variant games are *Gunboat* (where the identity of the individual players are unknown to each other and the players must rely on their tactical skill) and *Woolworth Diplomacy* (which is played on a slightly different map of Europe with each player playing two positions in each game). Many other variant games are run regularly in

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TED. One can even try a position in one of the frequent "Round Robin Gunboat" tournaments where seven players get together to play in seven *Gunboat* games simultaneously. Each player plays a different power in each game.

For the armchair railroad engineers, PBMGAMES Forum offers the Rail Games section. The weekly ELECTRIC TRAINS publication features games of *1830*, *Railway Rivals* and other popular rail games.

1830 is **Avalon Hill**'s classic game of track building and finance in the Age of Steam. *Railway Rivals* is a British game which has been very popular in PBM circles. Last available in the U.S. through an edition published by *Games Workshop*, players must build efficient track on a map of a particular geographical region. The map for each game is different and, with dozens to choose from, the variety is endless. There are current RR maps for most states of the U.S., all of Europe and Asia, even Tolkien's Middle Earth! The game usually features three to eight players per game and most games finish in three months or less. Rules and maps can be ordered on-line.

Other types of board games can be played in PBMGAMES general board game section. Among some of the games that have been run in the last few months are: *Monopoly*, *Acquire*, *Dune*,

> There are current railroad maps for most states of U.S., all of Europe and Asia, even Tolkien's Middle Earth.

Junta, *Wooden Ships and Iron Men*, *Civilization* (the Avalon Hill board game), *Advanced Civilization* and many others. If the game can be adapted to playing by electronic mail, chances are that opponents can be found in this section of the forum.

Traditional war gamers can find opponents in the War Games section. Many different games have been adapted for play in PBMGAMES Forum, including *Third Reich* and *Titan*. Anyone tired of playing solitaire is almost certain to find opponents, here.

The cost of playing in a PBEM board game on **CompuServe** is surprisingly affordable. With the advent of automated communications packages which give the user the ability to do all the time-consuming work of composing messages off-line, the average player can play in a number of games for around $20 a month. Of course, the cost may vary depending on the number of times one signs on and the number of messages written.

So, for those gamers who fondly remember the days of playing board games with real human opponents, **CompuServe**'s PBMGAMES Forum can become a home away from home. For information on how to join **CompuServe**, call 1-800-848-8990. CGW

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A Convention Report from GenCon/Origins 1992

by Alan Emrich and Johnny L. Wilson

"What does GenCon stand for, anyway?" asked a first-time attendee at what is, perhaps, the oldest continuing game convention running in the United States. When we answered that it stood for "Geneva Convention," the attendee laughed at our outrageous pun. GenCon does, however, stand for "Geneva Convention." Since **TSR, Inc.** (once known as **Tactical Studies Rules**, but now known as the publishers of *Dungeons & Dragons*) is located in Lake Geneva, WI and both owns and hosts the convention (which is held every August in Milwaukee, WI), the convention is affectionately named for its original locale. Now, however, it has evolved into a supershow for role-playing gamers and, because of its rich association with both two large active user groups (one for the Atari ST and one for the Commodore Amiga), one of the most well-attended shows for computer gamers. This year, GenCon was combined with Origins, the national strategy game convention and the mix was special, indeed.

Origins is sponsored by GAMA (the Game Manufacturers' Association) and travels around the country each year. (Last year found it in Baltimore, next year it will be in Dallas and in 1994 in San Jose). Origins began as a wargame convention established under the auspices of both **The Avalon Hill Game Company** and **SPI** in the 1970s, but evolved into a showcase for the entire hobby. It has not, historically, been a strong show for computer gaming, but GAMA officials were impressed by the computer room showing at this convention (though many were confused as to the lack of participation from the MS-DOS world) and are making plans to have a significant computer presence at their next two conventions.



Editor Johnny Wilson schmoozes with the folks at MPG-Net

Regardless of the past and future, however, this year's convention was a combined supershow and this was reflected in both gamer and exhibitor attendance. The exhibitor room itself tells the story. From our vantage point at the CGW booth (where many readers stopped by and said "Hello"), it was easy to see that this was a well-attended show. While the official figures are still to be released from TSR, Inc., our estimate of 15,000 gamers and 150 exhibits is probably not too far off.

Oddly, the number of costumed individuals (everything from guys dressed as barbarians to women in chainmail bikinis) seemed to be down from recent GenCons. Perhaps the larger-than-expected turnout of wargamers put them off, because it certainly wasn't a result of the perfect weather outside.



Origin's Warren Spector and Richard Garriott look like they partied too much the night before

Each morning as the exhibitor room opened, we saw scores of gamers run past our booth en route to the FASA booth. There, they mobbed each other to pick up a copy of *Shadowrun, 2nd Edition*. White Wolf's *Werewolf: The Apocalypse* seemed ubiquitous, as well. *AD&D* fans turned up the heat with **TSR**'s release of their *Al Qadim* boxed set. This is sort of *AD&D* goes Arab and seemed to be quite a draw at **TSR**'s huge, four-story "castle" booth display. Other items of note for the people and paper game industry included: new *GURPS* modules from **Steve Jackson Games** (as well as miniatures rules for *OGRE*) and the re-release of *Jorune*.(expected to be a 1993 CRPG from SSI).

For CGW's staff, the boardgame that captured our attention was **Milton Bradley**'s *Battle Masters,* a **Games Workshop** design where players move large, plastic miniatures of the armies of Good and Chaos over a bedspread-sized terrain map. Chris Lombardi proved to be the *CGW* champion at this game, while regular reviewer David Wilson defeated his elder brother editor and **QQP** President Bruce Williams Zaccagnino upset on-line editor Alan Emrich in a see-saw battle where momentum shifted more times than in an NFL football game.



Alan Emrich & Chris Lombardi settle an editorial argument with a game of Battle Masters

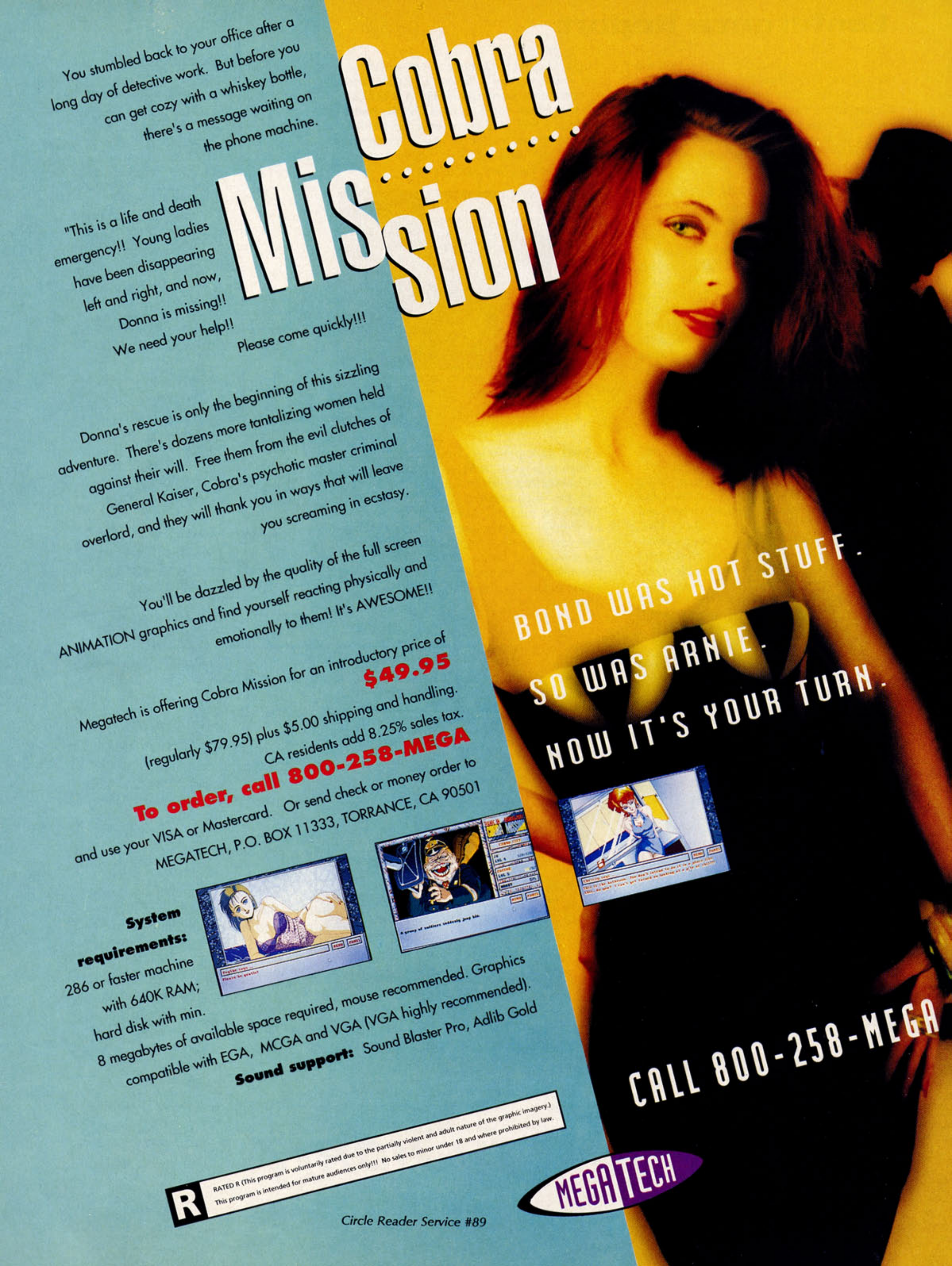
Charles S. Roberts Awards

Normally, the Charles S. Roberts awards are formally presented at the show. This year, a logistics error forced the cancellation of the awards ceremony. Some of the winners included:

Best Pre-WW2 Board Game: *Alexandros* from XTR
Best WW2 Board Game: *EastFront* from Columbia Games
Best Post-WW2 Board Game: a tie between *Hornet Leader* from **GMT** and *Inchon* from XTR
Best Pre-20th Century Computer Game: *Sid Meier's Civilization* from MicroProse
Best 20th Century Era Computer Game: *Secret Weapons of the Luftwaffe* from Lucasfilm
Best Wargame Graphics: *Hornet Leader* from GMT and
Von Clausewitz (Hall of Fame) Award: Mark Herman.

It's *CGW* Live!

When CGW first offered a seminar at GenCon, it offered a panel of award-winning designers and garnered an attendance of about 20 diehard gamers. It was held


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directly across the hall from the auction and lasted one hour. This year, CGW's editor and on-line editor offered a seminar on "Everything You've Ever Wanted to Know About Computer Games" and more than twice as many gamers not only *attended*, but were still asking questions after the scheduled 2 hours were over.

Four years ago, there were only a couple of places for gamers to meet other gamers on-line and there wasn't much interest at the gaming conventions. This year's GenCon proved to be different. It featured booths and attendees from **GEnie** (showing the new SVGA *Air Warrior* and *Multi-Player BattleTech*; the new **Multi-Player Games Network** (displaying their on-line role-playing game *Drakkar* and *Empire Builder* and *Operation Market-Garden* strategy games); **Summit Games Network** (demonstrating their multi-tasking capable system for meeting gamers of all kinds); and **National VideoText** (talking up their new network with the classic *Island of Kesmai* as its flagship game).

Also, four years ago, there were only about four computer game publishers present at GenCon. This year, there were seven. Many just showed CES demos, but some had brand new product to sell and others had new products to talk about. **Origin** was selling games, but spent more time fielding questions about the much delayed *Strike Commander* than anything else. **MicroProse** was not allowed to sell any *Darklands* games because the "street date" was the Monday after the show and retailers might be upset if the games were sold early. So, they showed CES-style videos and touted their upcoming **Ancient Art of War in the Skies** (originally a **Broderbund** product). **SSI** seemed to have no trouble getting gamers excited about *Shattered Lands*, the first of their "new engine" CRPGs in the *Dark Sun* universe.



Emrich and Wilson square off at CGW panel "discussion"

SSG, perhaps the leading computer game company in terms of AI, arrived at GenCon with more than a pocket full of demos. They had the long-awaited *Carriers At War* (IBM) for sale and stated that the Macintosh version was already working (in color) and would be out as soon as they finished the black and white version. They also promised an improved version of *Warlords*, tentatively entitled *Warlords II*, early next year.

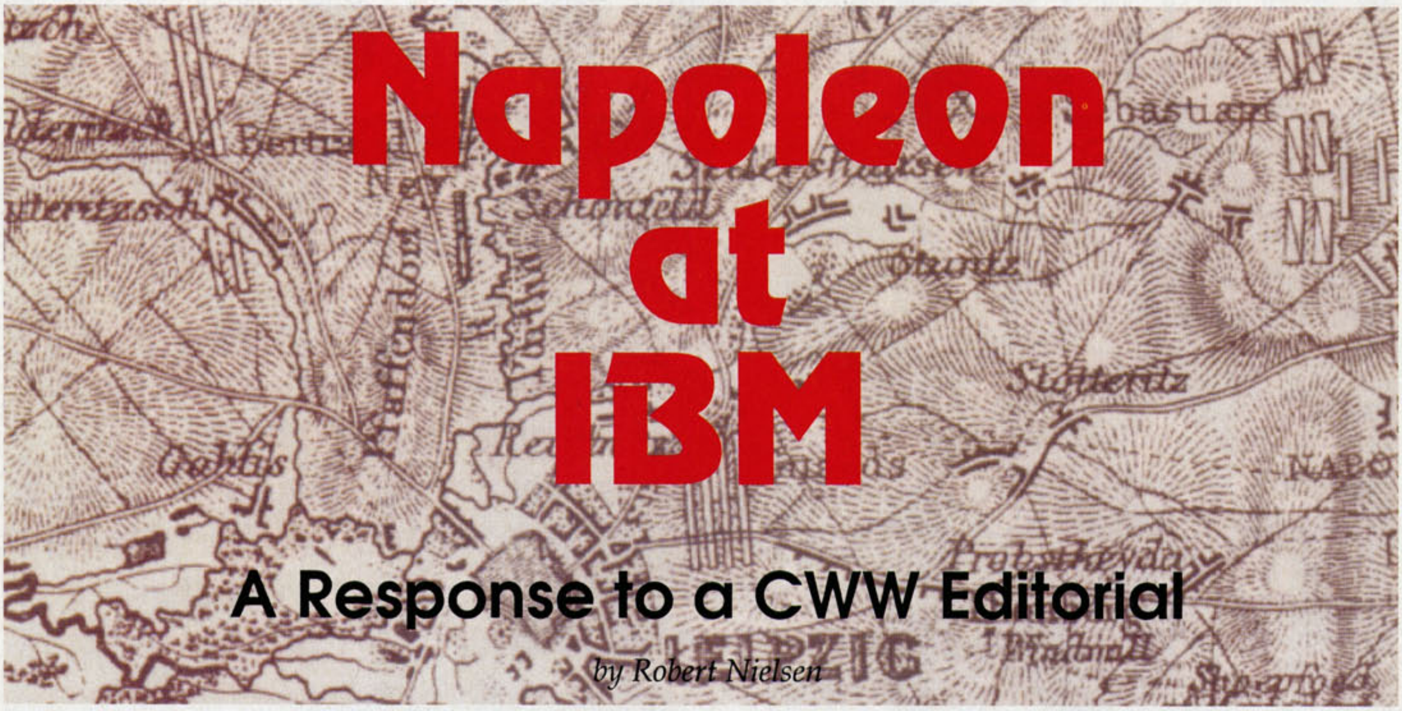
Electronic Arts elected not to sell games at the convention, but demonstrated both "pencils" and colored screens of their upcoming *Space Hulk* game (based on the **Games Workshop** boardgame), *Car & Driver, Black Crypt* (originally discovered at a previous GenCon) and *Lost Files of Sherlock Holmes*. Other projects displayed at the EA booth included: *Bard's Tale IV, Ultrabots, Seal Team* and *Dangerous Journeys: Necropolis* (the first in a projected series of computer games based on the new E. Gary Gygax design from **GDW**).

Meanwhile, **QQP** was selling plenty of copies of *The Perfect General*, *The Lost Admiral* and *Solitaire's Journey*, while talking up their next release, *Conquered Kingdoms* (medieval combat with modem play and *lots* of playability).

Finally, **The Avalon Hill Game Company**, one of the original sponsors/exhibitors of Origins, was not only selling *Computer Third Reich* for Amiga and Atari ST, but they were selling a new version of *Computer Diplomacy* for those machines. [Note: The IBM version in the new boxes is still the original version.]

Two Roads Diverge

All in all, the GenCon/Origins event seemed a stirring success in 1992. The question is, "Which convention should we attend next year?" Both? CGW



Napoleon at IBM

A Response to a CWW Editorial

by Robert Nielsen

How many wargamers does it take to simulate history? The answers range from many to none. For example, one type of wargame is nothing more than large scale maneuvers of up to thousands of troops and their officers. Instead of bullets and bombs inflicting casualties, umpires make the decisions as to who is eliminated in combat. The 19th century witnessed the development of the "kriegspiel" variety of wargame, which has eliminated the need for soldiers. Instead, the general staffs issue orders to imaginary troops. Then, umpires make the decisions as to how the troops carry out the orders and their effectiveness in combat.

Boardgames have done away with umpires, probably because it is easier for a Prussian general to order his staff to spend their Saturday night doing the paperwork for a wargame than it is for today's gamer to find someone stupid enough ... er ... willing to perform the drudgery of umpiring a game. More recently, computer games have replaced a player's opponent with an artificial intelligence (AI) routine. In fact, several computer games have the option of the computer playing both sides, completely eliminating any human presence.

Eliminating the human element from simulations is not without its disadvantages. As has been discussed in *CGW* by Alan Emrich and others, even a very good AI program does not play the same as the player. The question was raised: what about AI to improve play between two people? The idea of AI routines to improve the play between people reminds one of the umpires in the kriegspiel type simulations. These



umpires were invaluable in handling details behind the scenes and helping simulate the fog of war, i.e., revealing to the participants only what they would be able to know if they were in the real situation.

A couple of years ago, motivated by the idea of having the computer perform some of the tasks of a human umpire, I wrote such an AI program. **SPI**'s (**Simulation Publication, Inc.**) game, *Napoleon at Waterloo* (*NAW*), served as a starting point. *NAW* is similar to other boardgames in that printed counters represent military units. The combat strength of a unit is represented by a number. Combat is resolved by comparing the ratio of the attacker's strength to the defender's strength. The higher the ratio, the more likely the attack is to succeed.

Playing the game, one finds oneself constantly concerned with the odds (ratio of attacker to defender strength). For example, two attacking units with strengths of 5 and 4 confront a defender with a strength of 5. This yields 9-5, or 1-1 odds (rules stating that fractions are lost). However, if a unit with an attacking strength of 6 is used instead of the 5, the attack is 10 (6+4) to 5, or 2-1 odds, more favorable to the attacker than the 1-1 odds previously mentioned. Consequently, players find themselves making decisions that Napoleon or Wellington probably never made.

Imagine Napoleon saying, "Send regiment X into the attack rather than regiment Y in the attack against the Hougomont so the odds will be doubled." In reality, Napoleon would have probably known that on the average regiment X was slightly more effective militarily than regiment Y, but for us to believe that he could have been able to mathematically calculate the precise increase in strength is an absurdity. Besides, regiment X might be having a bad day and regiment Y a good day, in which case that day regiment Y could outperform regiment X.

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To simulate these vagaries of combat strength, my AI umpire randomly (and secretly) adjusts the combat strength up or down 1 point, or sometimes makes no change to the printed strength. Thus, the unit that has 6 printed on it may be a 5, 6, or 7. Similarly, the unit with 5 printed on it may be a 4, 5, or 6. This means that if the 6 is a adjusted to a 5 (having a bad day) and the 5 is adjusted to a 6, the 5 is actually stronger than the 6. The net effect is to have the players stop counting numbers and simply send their troops into battle knowing their approximate strengths (and fervently hoping their troops are not having a bad day!).

Another feature of the *NAW* boardgame is the concept that armies become demoralized after losing a certain number of their forces. Realistically speaking, armies do not fight to the last man, but rather, break after reaching a certain loss. In *NAW*, an army is demoralized after losing 40 strength points. Consequently, if the Allied player sees that the French army has lost 39 points, he will make maneuvers and attacks that he would not otherwise make if he can be assured that his attacks will result in the French going over the limit and becoming demoralized.

Imagine Wellington ordering, "Move everybody forward. After our attacks the enemy will be demoralized and unable to mount a credible counter-attack." Instead, Wellington would have only a general idea when the French might break. Therefore, my AI umpire was programmed to keep track of the total eliminated "hidden" strength points. When 40 points were reached, a player would be informed that his army was demoralized. Because the umpire keeps track of hidden points, players have to do more guessing than counting as to when the enemy will break. For example, suppose the French had lost 7 units with a total printed strength of 32. The actual (hidden) value could be as little as 25 or as much as 39. Most probably, the total is near 32, but not 32. The result is that the a player can have only an approximate idea when an army is close to being demoralized.

The AI umpire was assigned other tasks. For any combat, it totals the forces involved, calculates odds, does the computer equivalent of rolling a die, looks up the result and informs the players. The players are told only the result, not the odds or any information that would allow them to deduce actual combat strengths. Housekeeping tasks such as saving games and listing eliminated units are also taken care of by the program.

While the program has several advantages there are some disadvantages. One is that to play the game, you need a table set up next to your computer. Another is that the program was somewhat long to write: over 1000 lines. The program was written in a version of Prolog called PDC Prolog, a relatively high-level language. In a lower-level language such as C, the program would have been significantly longer.

Additionally, even though I have personalized the AI umpire in this article, in the program the AI umpire does all its work behind the scenes. For the average user, the program is simply doing its job rather than being an AI program. I am reminded of some of the routines in **SSI**'s *Second Front* game. For example, the computer resolves battles between the Germans and the Soviets, keeping track of individual guns, tanks and airplanes. Is this an example of the computer simply doing its job or being "artificially intelligent?" One pundit has defined artificial intelligence as being the computers ability to do the things people *can* do but computers cannot do.

Finally, my program was intended for face-to-face play. It would have been useful for the program to handle electronic play-by-mail, doing such things as helping to create the files needed to send another player via modem. Some of the files sent could allow the other player to print maps showing unit positions before and after moving.

In any case, the AI routine creates a simulation where the decisions of the players more accurately reflect the decisions of Napoleon and Wellington. Also, the AI umpire does not mind working on Saturday nights. **CGW**

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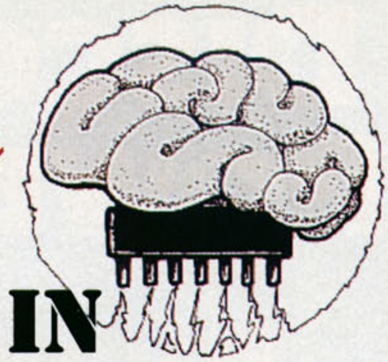
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Shuffling the Cards for Computer Opponents



A. I. RATINGS IN CARRIERS AT WAR

by Roger Keating and Gregor Whiley

Very early on in the design process of CAW, we at **Strategic Studies Group** had to make crucial decisions about the form of the Artificial Intelligence system that the game would use. Most strategy games are still played against a computer opponent, but these computer opponents are usually not strong. Their play is often stereotyped, and becomes predictable after a few games. Even worse are games where, through rigidities or deficiencies in design, a human player can completely avoid the spirit of the rules, and develop techniques for an easy and guaranteed victory.

While our own games are recognized for their strong AI systems, we were very aware of the limitations inherent in our current AI designs. If we wanted to achieve significantly greater results, it followed that what we really needed was a completely new method of programming AI systems.



Before explaining the design process, the fundamental behavior of computer AI should be explained. Imagine the AI system as sitting below a hex grid. Any time it likes, it can select what it wants to look for and then look up through the grid. What it 'sees' is a field of numbers. It can select some of these numbers, and store them or manipulate them according to some rules. The computer never 'sees' a complete setup, nor can it recognize patterns like front lines, or concepts like flanks. The best it can do is collect its numbers, and process them in accordance with its rules. Hopefully this will produce decisions which make it appear as though the computer 'knows' what it is doing, and that it has 'recognized' the front line or other strategic concepts.

The first part of the design process is to decide which numbers the computer will use. Even more important is how these numbers are stored, and the relationships allowed between them. Mistakes at this stage of the game design can cause massive problems later on in the design process. The database will inevitably be amended several times, but if the fundamentals are not correct, then the game will be limited.

To use one of our games as an example, the AI in *Warlords* is limited in a few instances by the structure of the database. Some computer games still seem to be developed to a beta test stage before AI is even considered. This approach must lead to fundamentally weak intelligence.

The second stage of the design process is to develop the mechanical utilities that the game will use. In *Carriers At War*, these are the movement and combat systems. SSG has developed a generalized movement system, which can derive an optimum path between any two points on a map. Appropriate conditions are simply fed to the system. Planes have no movement restrictions, ships aren't allowed on land, or to move across shoal hexsides, and so on. The AI designer will rely heavily on the fact that on being told to go somewhere, units will make the best decisions.

To continue to valiantly criticize our own games, the computer's complete lack of interest in naval movement in *Warlords* came about because the terrain database was not structured correctly. This meant that the movement routines in *Warlords* could not be optimized. With our new routines, these problems are completely solved.

It is important that the routines should not know whether they are moving a computer or human controlled unit. Some games force human controlled players to move hex by hex. Not only does this mean unnecessary work for the player, it means that the computer's moves will probably be weak, or that the game designer will be forced to relax the rules for computer movement and allow it to 'cheat'.

The third and most important step is the actual method by which the AI decisions are generated. In *CAW*, this process is a unique system which we have called WarRoom.

The fundamental principle of WarRoom is to take the AI design away from the programmer, and make it available to everyone. WarRoom is a system for generating plans and responses for computer controlled forces. The capabilities of the system are limited only by the AI designer's imagination.

For example, in the original 8 bit version of *CAW*, the Japanese transport group scheduled to invade Port Moresby always left Rabaul at the same time, and followed the same course. With WarRoom, all that has changed. The transports can now be delayed for a few days, or given a different course, or even sent off to invade Brisbane! They can select between courses of action at any time during the game. The Japanese carriers can be instructed to sweep ahead of the transports, or escort them closely or to make a sudden lunge for likely areas of US carrier operation. Plans for the transports and the carriers can be coordinated so their combined options remain sensible.



As well as controlling the movement of computer forces, the AI designer also controls their response to the enemy. Groups can be told which type of enemy to attack, and from what range. No-go areas, (for instance those too close to enemy land based air) can be specified. One can even specify how resolutely forces will attack, and under what conditions to withdraw.

WarRoom instructions consist of a series of cards. Each card has some conditions governing its selection, and a list of actions, which will be carried out if the card is chosen. Cards can be linked in series, or branch to completely different courses of action. The conditions are things like position or time. The actions include movement, CAP and search orders, and the responses to enemy sightings.

By using the card system, the AI designer can control both the actions and responses of his forces and change those as often as he likes. Since the cards can have chances attached to them, a random element is easily introduced, but one which chooses between sensible alternatives. Special setup cards can even change the location and composition of any force in the game. A human player could be facing an enemy with an extra, hidden carrier , or he could be given different forces at the start.

The AI designer is now in the position of an admiral. He can set plans for all of his groups, and set the doctrine for their responses to the enemy. Those plans can be specifically created to fool a human player. For instance carrier groups can be set to patrol some innocuous point during daylight hours, then make high speed runs at night to appear somewhere totally different.



can be set to patrol some innocuous point during daylight hours, then make high speed runs at night to appear somewhere totally different.

As well as making computer players much more competent, the WarRoom system also removes the crippling burden of predictability from the computer player. Human players can no longer rely on the what the computer did last time as a guide to what it will do next time. And even if a player eventually gets familiar with a scenario's permutations, all it will take is the addition of a different WarRoom file to his system to remove that reassurance. Even the computer's Order of Battle could be altered.



WarRoom is really a fourth generation computer language, applied specifically to the task of describing AI processes in strategy games. SSG has created the system, and we can expand and build on the language as required. Anyone who purchases the *CAW Creation Kit* will be able to change the WarRoom plans included with *CAW*, or create new plans from scratch. We hope that users will get involved in the AI process, creating their own plans and surprising their friends with their fiendish strategies. The creation kit will be available about two to three months after the *CAW* game release.

The WarRoom system is applicable to many games besides *CAW*. In a game like *Warlords*, it could be used to give computer players a choice of strategies. The game could keep a record of which strategies worked and which did not, using this information to build up a 'personality' as well improving its chance of success.

A WarRoom system could also be used to run third party players. In a *Warlords* context, this could mean sudden incursions by Vikings, Huns or other raiders. These would be outside the control of either the human or computer players. They would have their own objectives and strategies described by a WarRoom system, and would be able to respond intelligently to attacks against them. Just the qualities one is looking for in extra opponents.

We can see no limits to the ways and means of applying a system such as WarRoom. When one plays against the computer in *CAW*, one is actually playing against SSG's own plans, and hence against SSG. We will be developing more plans for the WarRoom system, and we can assure players that we have only just begun to fight. CGW


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Circle Reader Service #48

Electronic Arts And Origin Pool Resources In "Ultimate" Acquisition

Electronic Arts (NASDAQ: ERTS) has agreed to acquire Texas-based **Origin Systems, Inc.** in a 1.3 million share stock exchange worth approximately $35 million. As published on Prodigy after the market close of September 4, 1992, in a story based on the recurring rumor concerning the deal, the operations in Austin, TX will continue to function as an independent (though wholly-owned subsidiary) unit. Origin President Robert Garriott will continue to act as Origin's president and will become an Electronic Arts vice-president, while Richard Garriott (Lord British) will continue as Creative Director at Origin and become an executive producer for Electronic Arts. In addition, the world-famous designer has relinquished his personal copyright on the *Ultima* trademark as part of the deal.

Both organizations win in this pooling of interests. In order for the current entertainment software industry to be able to take advantage of future technologies and avoid being swallowed by larger players in the overall entertainment and computer industries, existing publishers will need to be making new alliances. This deal provides new marketing muscle and opportunities for Origin's talents.

Also, though the original article on the rumored acquisition mentioned alleged cash flow problems and employee losses, Origin asserted that they had *not* lost a significant number of employees, were expecting the best fiscal quarter in their history (assuming all scheduled products shipped) and had considered an independent IPO (Initial Public Offering) of their own prior to electing to join Electonic Arts' forward looking expansion into new technologies. Origin's General Manager, Fred Schmidt, stated that one reason for the desire to change the corporate structure was to be able to allow more significant employee participation in the ownership of the company. He alluded to a stock distribution to certain Origin employees as a result of the current deal.

What is truly unusual about this partnership is the fact that Electronic Arts and Origin had a parting of the ways in 1987. Furious that an Electronic Arts title, *Deathlord*, appeared to use *Ultima*'s tile set of terrain and appeared to be *Ultima* with a thin veneer of pseudo-Oriental flavor, Lord British insisted that he would leave EA's affiliated label program if the company published the alleged clone. EA's then CEO/President, Trip Hawkins, was just as adamant that the tail (i.e. a one product company) would not wag the dog (i.e. Electronic Arts Distribution).

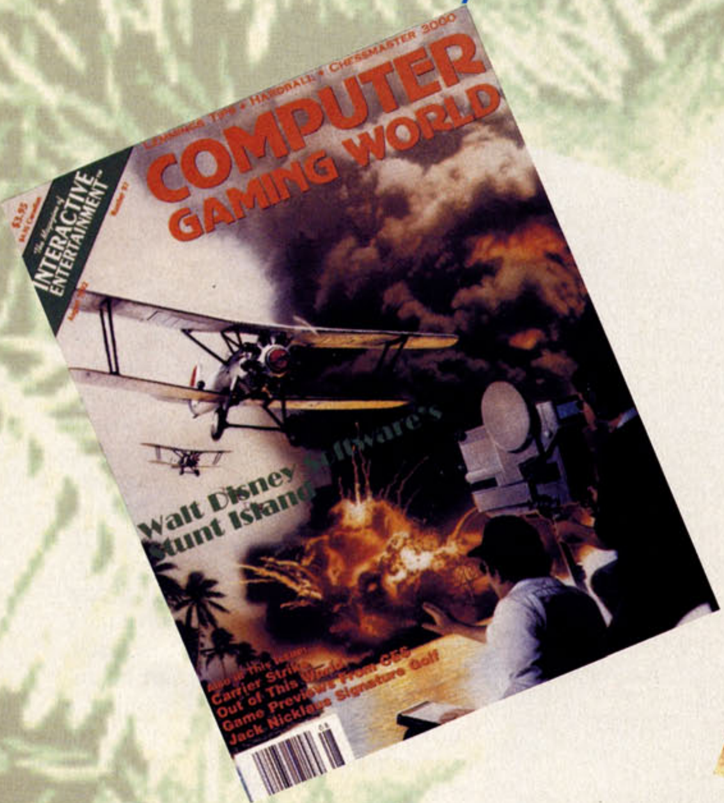
Lord British not only lived up to his threat, but allegedly reaped a cathartic revenge on Hawkins by naming a pirate leader (found in more than one *Ultima*), Pirt Snikwah (try that one backwards). Some people think that the sphere, tetrahedron and cube which the Guardian asks the avatar to assemble in *Ultima VII* bears an interesting resemblance to the three basic shapes in EA's logo. One has to wonder if EA's executives are going to be as good-natured about (what is now going to be) self-deprecating spoofs in Origin's existing product line as **Lucasfilm** was about the ™ jokes in *Monkey Island*.

So, why does a company which grosses over $200 million per year purchase a $13 million per year company? In this case, Electronic Arts is recruiting, acquiring and aligning with partners that can help them exploit future opportunities in new technology. Hardware manufacturers, venture capitalists and entertainment conglomerates are all part of a murky near future where EA, particularly through the SMSG tri-venture with Time Warner and Kleiner, Perkins, Caulfield, appears to have an edge. To exploit the future platform(s), the company will need recognizable, marketable products and solid technology. Origin provides both. **CGW**

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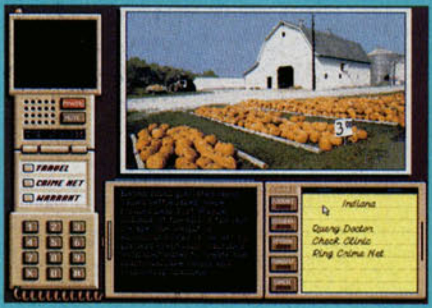
WHERE IN THE USA IS CARMEN SANDIEGO DELUXE: With the millions of kids after this woman you'd think *someone* would finally find her. But, she's at it again. This time, however, the infamous Queen of Edutainment is all dolled up for her appearance on the state-of-the-art MS-DOS machines. Enhancements to the original *USA* hit include gorgeous new digitized VGA background graphics, a new Dataminder/Videophone interface (like that in *Where in the World?*), a complete series of regional maps (as opposed to the one U.S. map in the original), and 3000 new clues for kids to track down in their latest edition of *Fodor's U.S.A. IBM ($79.95).* Circle Reader Service #1.

Buena Vista Software
Burbank, CA

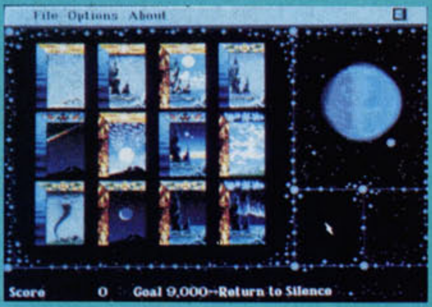
HEAVEN & EARTH: Though this game's fiction directs one towards a convergence of mind on the "ground of wakefulness and sanity" underneath our inattentive Western lifestyles, the package is actually a composite of three wildly divergent diversions. The first game is not really a game at all, but a toy of sorts. While tapped into one's nascent sense of rhythm and harmony, one must direct a swinging pendulum over a series of gravitational vortices. While an interesting concept, those without the patience of a monk will probably race recklessly toward the next diversion; a complicated solitaire rummy of sorts where the player (turned Buddhist acolyte) must compose tricks based on seasons, elements, and landscapes, with special celestial phenomena to completely confound matters (though they do have cute animations and sound effects for each). The card game is more interesting than standard-deck solitaire and can be just as addicting. The third game is the one least in the Tao of the package concept. Labeled "Illusions," this is a set of abstract geometrical puzzles similar to those in Cliff Johnson's *The Fool's Errand* or *3 in Three*. Though challenging, the stark, logical nature of the puzzle fits into the package concept like a cubist nude in a Chinese landscape painting. IBM ($49.95).
Circle Reader Service #2.

Capstone
Miami, FL

LOTTO GOLD: To the skeptic, lottery number analysis seems to be the modern equivalent of alchemy — attempting to turn the mad, mystical scribblings of one's pencil lead into gold. To those more hopeful (naive?) this latest version (2.1) of the 'ultimate lottery analysis program' may offer the tools one needs to shave tens of thousands of points off of one's several million-to-one odds. One can apply several fancy sounding mathematical analysis techniques to one's favorite lottery results to yield The Winning Sequence. In addition to straight-forward historical analysis, averaging techniques, and number frequency analysis, one can take his/her biorhythmic biodata (based solely on one's birthdate) and manipulate it using a Fibonacci Analysis or data from the I Ching! IBM. Circle Reader Service #3.



Carmen USA Deluxe



Heaven & Earth



Lotto Gold



Casino Master

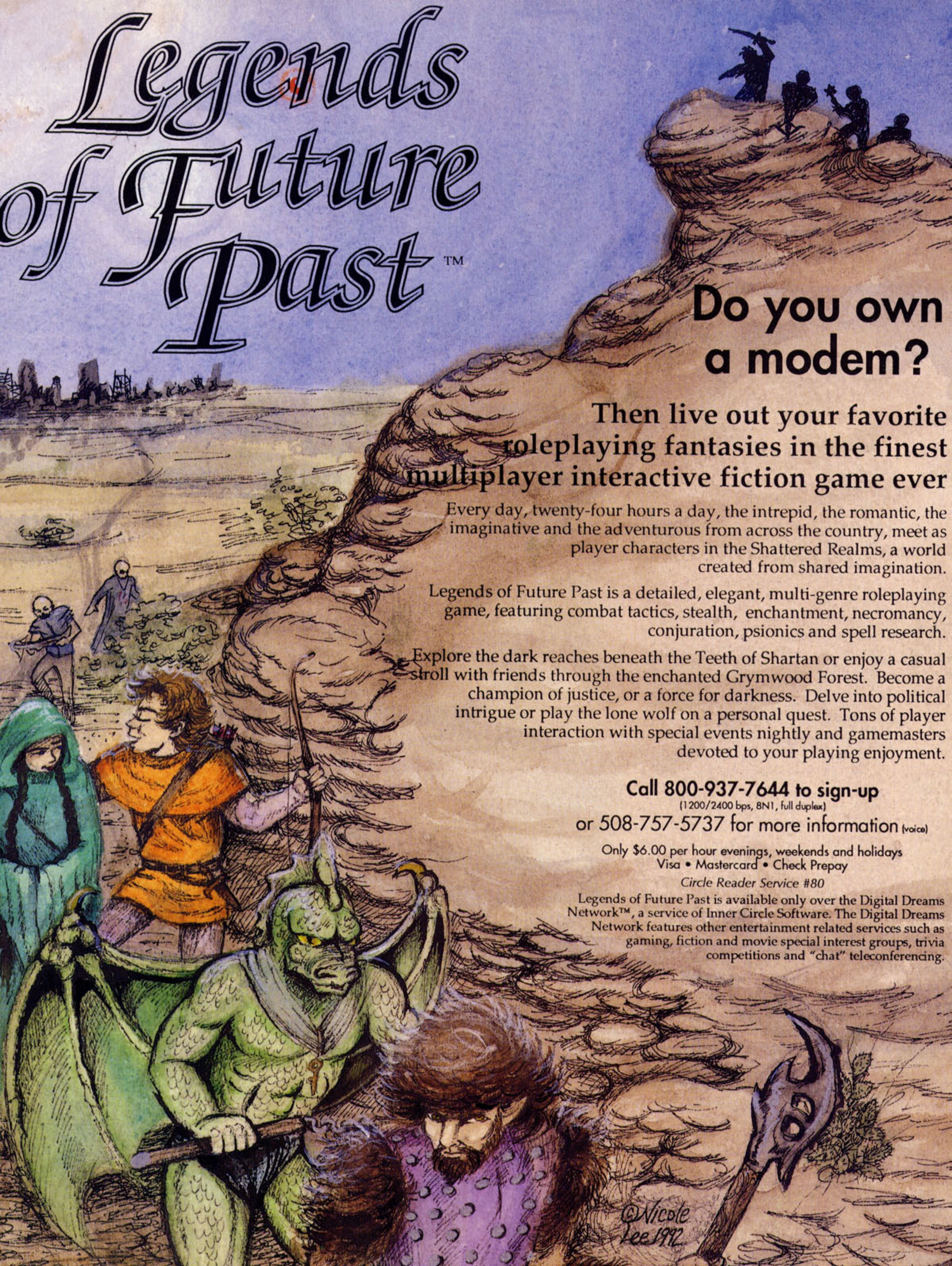


Puzzle Master

Centron Software
7718 La Mirada Drive
Boca Raton, FL 33433

CASINO MASTER: This seems a reasonably nice package of non-glitzy gambling games. Its games of chance include: craps, blackjack, video poker, roulette and baccarat, with win/loss data kept and varying levels of odds information provided for each. The craps game allows one to select stake and chip values and provides a decent introduction to the house advantage odds for all bets. Blackjack is blackjack, but this program has a card counting function and a counting tutor in the documentation. The video poker program is none too thrilling, but neither is it in reality. The roulette system is nothing to scream about (the docs boast of an animated wheel. Whee!) but, once again, the docs provide useful information on betting strategies. Finally, the package includes a baccarat system which is a pretty hard program to find. If one is a baccarat player, this program itself might be worth the price of the entire package. All in all, this is a great introduction to the basics of betting strategy. IBM ($79.00).
Circle Reader Service #4.

PUZZLE MASTER: What's a 14 letter word for a crossword puzzle constructor, that starts with a "C?" Give up? Cruciverbalist, of course, and that's what one can become with this package. Included are 200 daily and 50 Sunday crosswords from the *New York Times*, as well as a puzzle creation utility. While solving the given puzzles one can check their current answers without revealing the other answers (cheat!), and get correct letters (cheat!) or full words (cheat!). For puzzle pur-


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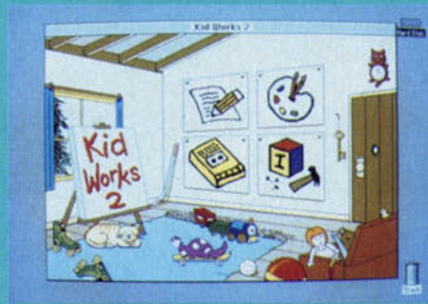
ists one can avoid the temptation to fudge (cheat!) and, if one is as skeptical about paperless crosswords as one is about the 'paperless office,' then the puzzles can be printed out and solved the old-fashioned way. IBM, Mac ($49.95). Circle Reader Service #5.

Davidson & Associates, Inc.
PO BOX 2961
Torrance, CA 90509

KID WORKS 2: Here's one for the aspiring writer/publisher in the home. This is basically a multimedia publishing tool for youngsters, that enables them to create fully illustrated stories that can be played back with voice narration. Children first write their story using words or pictographic icons, then they illustrate the story with a complete paint toolbox, and finally, they reap the fruits of their labór as the program tells the story back to them. How did we ever get by with crayons and paper? Mac ($59.95).
Circle Reader Service #6.

Domark
San Mateo, CA

TENGEN'S ARCADE HITS: *Toobin'*, *APB*, *Klax*, *Hard Drivin' II* and *Escape From The Planet of the Robot Monsters*; five action games from the middle ages of coin-op video gaming have found their way to the PC. *Toobin'*, or "my spring break at the Colorado River," involves piloting one radical vacationer down a river while snatching goodies and fending of fraternity boys by throwing river junk at them (no cerebral cortex required). In *APB*, one of the older games in the package, one plays a police officer on a rough beat. One must ticket litter-bugs and other heinous offenders while maintaining blood sugar with a continual donut supply, keep up the quotas and avoid demerits. *Klax* is a weird abstract action-puzzle where one must gather squares from a conveyor belt and order them into like stacks. *Hard Drivin' II* is the most interesting game in the pack, though it is a rather crude conversion of the excellent coin-op racing game. One speeds a roadster around a stunt track with loops, jumps and other strange road phenomena. It includes a track construction set, allowing one to create their own commuter nightmares. Finally, *Escape* is a Berserker descendant for two simultaneously playing joystick-jockeys. Battle nasty reptile thingies side-by-side! IBM ($39.95). Circle Reader Service #7.



Kid Works 2



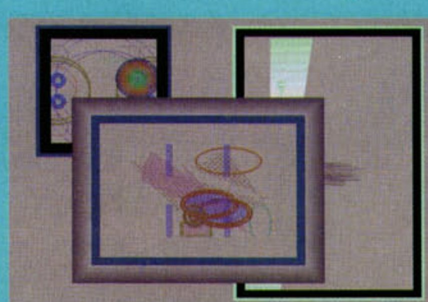
Tengen's Arcade Hits



John Madden Football II



International Sports Challenge



Cybart

Electronic Arts
San Mateo, CA

JOHN MADDEN FOOTBALL II: "Pow! Zap! Boom! See that block?!" Football's most charismatic color-man and champion of the down linemen, has graced yet another game box cover with his exuberant grin. An enhancement to the solid original, this package adds new features, like a one-on-one match-up analyzer, and a "Madden speaks" feature wherein the man with the electronic chalkboard offers his strategic advice on the game. The graphics have been revamped to include VGA support, but this is not exactly a good thing. Players view the field from a 3-D isometric, end-zone to end-zone view and the field scrolls and pans impressively with the action, but the players themselves have become more cartoonish and difficult to follow. Still, Madden II offers a rich play selection and creation facility, and one can play in both an action and a strategic mode. It does not offer real team or player names but, rather, "fictional teams inspired by" certain classic ball clubs and players. IBM ($49.95).
Circle Reader Service #8.

Empire Simulation
c/o ReadySoft Inc.
Richmond Hill, Ontario, Canada

INTERNATIONAL SPORTS CHALLENGE: If one's Olympic zeal hasn't waned in the months since the Barcelona games, it might be worthwhile to check-out this package of six unusual international events. one to four players can participate in the following: diving, from three platform heights with 40 different dives; shooting, with pistols, rifles and shot-guns; show jumping; a first-person horse riding event; cycling, also a first person simulation with rough, poly-filled graphics; swimming, the standard eye-hand rhythm and endurance test; and finally, the marathon, the standard joystick waggling blister-buster with some strategy elements (selecting refreshment schedules, random weather effects and choosing runners based upon their pre-event training schedule). Amiga, IBM ($49.95). Circle Reader Service #9.

Flying Turtle Software
PO BOX 1218
Port Townsend, WA 98368

CYBART — THE CYBERNATED ARTIST: This non-interactive piece of shareware generates framed pieces of abstract, mostly geometrical, art



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For the name of a Thunder Board dealer or simply some good sound advice, call Media Vision. 1-800-845-5870.

Circle Reader Service #91

through an "artificial creativity algorithm" which is allowed (programmed) to be creative (random) within certain defined bounds. Like a fireworks show, the program generates both duds and awesome sights. It occasionally generates such surprisingly impressive pieces that one may be forced to ask pointed questions about the nature of aesthetic expression — indeed, it could prompt a shallow discussion of the meaning of art between pseudo-intellectual editorial stuffed-shirts. Otherwise, it's kinda neat. IBM (Shareware Registration - $15).
Circle Reader Service #10.

The Learning Company
6493 Kaiser Drive
Fremont, CA 94555

TIME RIDERS IN AMERICAN HISTORY: News Flash! Dr. Dread, the media entrepreneur and owner of the Dread News Network (DNN) has captured a communications satellite and is using its transmission power to send phony headlines to the news networks. (Hmm...is that *Ted* Dread?) The player's job in this edutainment product is to use the historical resource databanks at the Time Rider's head-quarters to look up the correct historical headline facts and repair the damage done by Dread. The game covers American history from 1492 to 1905, and requires no supplementary books (like Carmen Sandiego's Fodor Guides and World Almanacs). Next to Carmen Sandiego, this appears to be one of the best edutainment titles in its age range (10 & up) and subject matter (history/geography). IBM ($59.95).
Circle Reader Service #11.

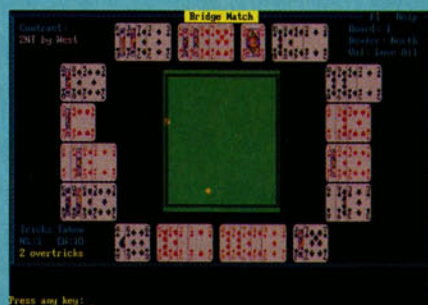
Lifestyle Software Group
63 Orange Street
St. Augustine, FL 32084

MICRO BRIDGE COMPANION: This extensive bridge package contains three programs: the Bridge Baron IV, supposedly one of the stronger bidding programs on the market; Bridge World Challenges, a collection of interesting situations from The Bridge World magazine; and, a Personal Play Library which lets one database, review and replay past hands from one's play history. Bridge Baron was designed by Tom Throop, who has been programming strong bridge algorithms for many years. IBM, Mac ($59.95).
Circle Reader Service #12.

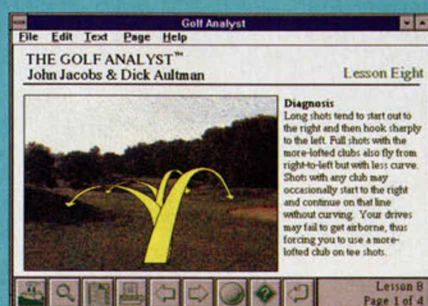
GOLF COMPANION: Just in case one gets bored with one's golf simulation and actually goes out and hits live balls on real grass with living, breathing companions, this package may help its user along the way. Compatible with hand held organizers like the Casio B.O.S.S., Atari Portfolio and Sharp Wizard, among others, this program offers a swing analyst feature, handicapper and a golf travel guide. By analyzing the golfer's response to a series of questions about the flight path of one's ball, the program will determine the potential problems with one's swing and offer advice and schematics to help correct the problem. The handicapping feature simply keeps track of one's game, stroke by stroke, and calculates one's handicap. Finally, the golf travel guide is a database of course information for greens around the globe. IBM (Windows), Mac ($39.95).
Circle Reader Service #13.



Time Riders
In American History



Micro Bridge Companion



Golf Companion



Video Poker for Windows



Tom Landry Strategy Football

Masque Publishing
PO BOX 5223
Englewood, CO 80155
800-765-4223

VIDEO POKER FOR WINDOWS: Well, there's one editor on the *CGW* staff excited about this product. Every time we're in Vegas (for the Winter CES show), he seems to drop too much of his editorial paycheck in those infernal video poker machines. This program promises to make him a better player by offering extensive strategic advice and statistical analysis. One can play any style of game (Jacks or Better, Deuces Wild, Two Pair) for fun or for education in the Windows environment. The program offers constant advice on hands, has practice drills for pre-vacation warm-up, and will simulate an unlimited number of hands to test the long term outcome of one's particular strategy. No more trips to the change booth for this editor! Get me a (change) bucket! IBM with Windows ($54.95). Circle Reader Service #14.

Merit Software
Dallas, TX

TOM LANDRY STRATEGY FOOTBALL: One look at Merit's address tells the whole story about this endorsement deal. Options in this strategic pigskin package include a VCR-like replay device, a 'scenario editor' with which one can set up specific game situations for study, and of course, the "Ask Landry" option whereby the player can get tips from The Man. The game has no play creation option *per se*, rather one creates plays on the fly, starting from a play base. For example, the player might choose a "standard

VIKING SOFTWARE, INC.

VIKING RATINGS

A-Train	B
Chrisis in Kremlin	B+
Dune	A
Global Effect	C-
Hardball 3	A+
Heroes of the 357th	C-
Indy Jones Atlantis	A
MicroLeague BB 4	A
Powermonger (IBM)	A-

ADVENTURE/ROLE PLAY

PAST

	IBM	AMI
Black Crypt	-	34
Castles	36	36
Castles N. Camp.	19	-
Champions Krynn	19	34
Conquest of the Longbow	42	37
Curse Azure Bonds	34	34
Dark Lands	39	-
Dark Queen of Krynn	34	34
Dark Sun	October	-
Dungeon Master	31	31
Eye of Beholder	34	34
Eye of Beholder 2	38	38
Four Crystals of Trazere	34	34
Gatewy Savage Frontier	34	34
Heimdall	32	32
Heroes Quest 3	42	-
Kings Quest 5 VGA	42	39
Kings Quest 6	Sept	-
Legacy of Necromancer	27	-
Legend of Kryandia	37	-
Lord of the Rings	36	36
Lord of the Rings 2	36	-
Magic Candle 2	39	-
Magic Candle 3	October	-
Might & Magic 3	39	39
Might & Magic 4	39	-
M&M CLouds of Xeen	39	-
Merchant Colony	32	-
Pirates Gold	Winter	-
Pool of Radiance	15	15
Pool of Darkness	39	39
Prophecy of the Shadow	39	39
Quest for Glory (New)	22	-
Ragnorok	35	-
Rampart	28	28
Realms	20	Fall
Secret of Monkey Island	37	37
Secret of Monkey Island 2	39	39
Secret Silver Blades	15	34
Shadowlands	33	-
Spoils fo War	37	-
Tales of Magic	39	-
Treasures Savage Frontier	34	34
Ultima 6	42	42
Ultima 7	47	-
Ultima Trilogy 2	47	-
Ultima Underworld	47	-
Uncharted Waters	43	-
Warriors of Legend	20	-
Wizardry 6	39	39
Wizardry 7	42	-

PRESENT

Buzz Aldrin Space	42	-
Crisis in the Kremlin	42	-
D/generation	34	-
Dagger of Amon RA	42	-
Elvira 1	43	43
Elvira 2	43	43
Heart of China	37	37
Indy Jones Atlantis	39	-
K.G.B.	Sep.	Sep.
Leisure Suit Larry 5	42	38
Lost Treas. Infocom	42	42
Oh No! More Lemmings!	22	22
Jaws of Cerberus	43	43
Lost in L.A.	38	-
Out of this World	37	37
Police Quest 3	42	37
Rocketeer w/Sound	42	-
Savage Empire	39	-
Sea Rogue	28	-
Strike Commander	?	-
Willy Beamish	42	-

FUTURE

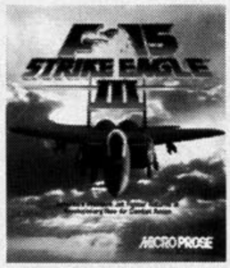
	IBM	AMI
A.G.E.	Sept	Sept
Battletech 2	19	-
Buck Rogers	15	33
Buck Rogers 2	34	-
Breach 2	21	33
Dune	37	37
Epic	42	42
Elite Plus	32	-
Free D.C.	40	-
Gateway	38	-
Hard Nova	34	34
Jonny Crash	Fall	-
Leather Godesses Phobos 2	46	-
"M"	November	-
Mantis Fighter	38	38
Martian Memorandum	30	-
MechWarrior	25	-
Megatraveller 1	15	-
Megatraveller 2	39	37
Megatraveller 3	Fall	-
Nova 9	25	-
Out of this World	37	37
Planets Edge	38	-
Powerhits Battletech	33	-
Rex Nebular	38	-
Rise of Dragon VGA	39	39
Rules of Engagement	39	39
Space Quest 4	42	37
Star Control 2	37	-
StarFlight 1	17	34
StarFlight 2	19	34
Star Trek 25th Anniversary	36	-
Twilight 2000	32	Fall
Twilight 2001	Jan 93	-
Ultrabots	?	-
Wing Commander 2	47	-
W/C 2 Spec Ops 1	19	-
W/C 2 Spec Ops 2	19	-
Speechpak	15	-

HINT BOOKS

AD & D Clue Books	10-12	-
Chuck Yeager Handbook	16	-
Civilization	17	-
Eye of Beholder 2	12	-
Falcon Air Combat	12	-
Lord of Rings	10	-
Lucasfilm Air Combat	16	-
Harpoon Battle Book	19	-
Magic Candle 2	10	-
Might & Magic III Hint	15	-
Planet's Edge	15	-
Railroad Tycoon	12	-
Run 5 Magazine 1-17	5	-
Seria Hint Books	8	-
Star Trek 25th	10	-
Ultima 7	10	-
Ultima Underworld	12	-
Wing Commander Hintbook	15	-
Wizardry 6 Hint Book	12	-

HARDWARE

Adlib	49	-
Soundblaster (Pro)	180	-
Soundblaster (Pro Basic)	150	-
Soundblaster (Micro Ch)	269	-
Gravis Eliminator Card	29	-
Gravis (Joystick)	39	34
CH-Flightstick	49	-
Pro Audio Spectrum 16 Bit	239	-
Thunderboard	99	-
Thrustmaster J/S	79	-
Thrustmaster Weapons Cntrl	79	



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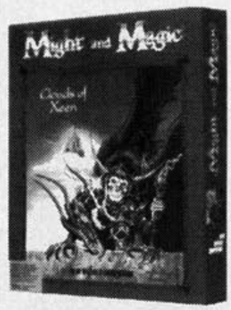
IBM $47/42



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IBM $37



CLOUDS OF XEEN

Might & Magic IV – Clouds of Xeen. Bigger and more astonishing than M&M III! This now linear game includes state of the art 3-D graphics and digitized speech. Includes new monsters, plots and schemes. A sure must for real time, first person gammer.

IBM $38



RAGNAROK

An excellent single-character role-playing game based on Norse mythology. As addictive as Warlords, this detailed, yet easy to learn product uses a "point and click" system. It has six (6) character classes, 200 unique races of beings and hundreds of items to discover. Look for add on disks soon.

IBM $35

STRATEGY

PRE WW II

	IBM	AMI
Bandit Kings China	39	39
Battles of Napoleon	36	-
Civil War Vol. 1, 2 or 3	27	-
Conquered Kingdoms	October	-
Genghis Khan	37	37
Gettysburg	39	-
Gold of Americas (SSG)	26	-
Grand Fleet	39	39
Kingdoms of England	-	37
L'Empereur	36	-
No Greater Glory	43	43
Nobunaga's Amb. 2	39	-
Prelude to Jutland	29	-
Red Baron VGA	42	37
Romance 3 Kingdoms 2	42	42
V for Victory	43	-
Warlords/Enhanced	32	32

WORLD WAR II

Aces of the Pacific	42	-
Action Stations V. 3.2	32	32
Action Sta. Data Disk	17	17
Air Raid Pearl Harbor	29	-
B-17 Flying Fortress	38	-
B. Tank Barbarosa	39	39
Bismarck	29	-
Carriers at War	42	-
Carrier Strike	42	-
Fleet Commander	Winter	-
Fleet Med	39	39
Great Naval Battles	October	-
In Harm's Way	39	39
Malta Storm	39	39
Midway	29	-
MBT Kursk	39	39
Panzer Battles	26	34
Rommel N. Africa	26	-
Second Front	37	37
Secret Weapons Luft.	44	-
P-38 (LUCAS)	20	-
P-80 (LUCAS)	20	-
DO 335	20	-
HE 162	20	-
Silent Service 2	34	34
Task Foerce 1942	XMas	-
Their Finest Hour/Battlehawks	44	19
Third Reich	28	28
Typhoon of Steel	19	39
V for Victory	43	-
Western Front	37	-

SCI-FI

Armada 2525	34	-
Breach 2	21	34
Imperium	28	28
Mantis	41	-
Reach for the Stars	28	28
Robosport (Windows)	38	38
Rules of Engagement	39	39
Second Conflict (Windows)	34	-

OCTOBER SPECIALS

Batletech II	19	-
Conflict Korea	16	-
Champions of Krynn	19	-
Curse Azure Bonds	15	-
Death Knights of Krynn	19	-
Knights of Legend	15	-
Mechwarrior	25	-
Ogre	19	-
Omega	15	-
Overrun	-	10
Patton Strikes Back	17	-
Quest for Glory II	22	-
Secret Silver Blades	15	-
War of Lance	12	-

MODERN

	IBM	AMI
A Line in the Sand	27	-
Adv. Tac Air Com.	Summer	-
Conflict Korea	16	37
Conflict Middle East	39	39
F-117A Nighthawk (VGA)	43	-
F-15 III	42	-
F-15 III Mstr Edit	47	-
Falcon 3.0	45	-
Falcon 3.0 Campaign Disk	25	-
Global Effect	34	34
Gunship 2000	38	-
Gunship 2000 Disk 1	22	-
Harpoon v.1.2	27	33
Harpoon #2 Or #3	20	20
Harpoon #4	22	22
Harpoon Designer Series	32	-
Harpoon Scen. Edit.	28	28
Harpoon Challenger Pack	43	52
M-1 Tank Platoon	36	36
MBT Centr. Germany	39	39
MBT Middle East	39	39
MBT North Germany	39	39
Megafortress (360)	28	39
Megafortress Mission Disk #1	24	-
Megafortress Miss #2	24	-
NAM	31	-
7th Fleet	39	39

GENERAL

A-Train	42	-
Civilization	38	38
Civilization Mstr Edit	45	-
Empire Deluxe	November	-
Global Conquest	39	-
Lost Admiral	38	-
Lost Admiral Enhanced	Winter	-
Perfect General	38	38
Perfect General Disk 2	October	-
Perfect General WW II Disk	22	22
Populous 2	-	39
Populous World Editor	-	15
PowerMonger	34	34
PowerMonger WW I Disk	-	22
SimAnt	38	38
Sim City	34	34
Sim Earth	44	44
Sim Life	Fall/Winter	-
Spoils of War	36	-
Theatre of War	33	-

SPORTS

Battle Chess 4000 VGA/SVGA	33/42	-
Grand Prix	37	-
Hardball 3	37	-
Players Disk	15	-
Stadium Disk	15	-
Jack Nicklaus Signature Golf	42	-
Links	39	39
Links Disks 1-7	16 ea.	-
Links 386	42	-
MicroLeague Baseball 4	33	-
NCAA College Football '92	37	-
NFL	42	-
NFL Pro League '92	37	-
The Games/SummerChallenge	October	-
The Games/Winter Challenge	36	-
Tony LaRussa	34	-
LaRussa Disks	15	-
Madden Football	-	34
MLBPA Stats '90	15	-
Pro League Baseball	37	-
Solitare's Journey	38	-
Wayne Gretsky 2	36	36
Hockey League Simulator	28	28
World Curcuit	Summer	34

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pass" base, then click on the medium pass button, click on the 'motion' button to set the flank moving, then the play action button to fake a full-back hand-off, and, finally, click on the pass pattern button to chose a down n' out for the primary receiver — and one has a play. As one might guess, it can get a little tedious building plays from the ground up every time. The field action is lively, though it is very difficult to tell just exactly what is going on, and the players feel a bit oversized for the field dimensions. It can get awfully crowded (i.e. it's not uncommon to find four defenders guarding a receiver on a deep corner pattern). Beyond the Christian Cowboy, Merit got no further NFL licenses for this product, so neither team names nor actual player names are used. Supports modem connect for long-distance Tele-Bowls. IBM ($49.95). Circle Reader Service #15.

MicroProse
Hunt Valley, MD

DARKLANDS: MicroProse's much anticipated RPG set in medieval Germany has been met by its public with much to-do. Some of the hoopla can be attributed to the hoard of bugs in the initial release (which has since been replaced by two updates), but the substantive debate surrounds the open-ended approach to game development, wherein the story is not a linear one leading to an ultimate conflict, but rather, the player is allowed the freedom to choose how the story should progress, which heroic tasks to take up, and when the game should end. Thus, the game becomes more of a 'simulation' and less of a story. Beyond this, Darklands has a wonderful character generation system, beautiful splash-screen graphics, a quasi-real-time 3-D, isometric combat system, a relatively simple armor/weapon system, an involved alchemical system, a unique approach to 'magic' involving the worship of saints, and a rather repetitive menu system when interacting in cities, hamlets, and monasteries. IBM ($69.95). Circle Reader Service #16.

Microsoft
Bellingham, WA

MICROSOFT GOLF: The computer industry giant makes its first major entertainment release since *Flight Simulator* in another "mass-appeal" genre. Developed for Microsoft by Access, this is actually *Links* for the Windows environment. While not as graphically stunning as Access' latest *Links 386 Pro*, it's still graphically superior to most competitors in the market. Now players can play all of the Links Championship Courses (completely compatible) in a customized windows environment while running other applications. Of course, the only practical use for the multitasking function is to sneak a few holes in your cubicle during work hours (no more need for a "Boss" key as the Windows magic key sequence (Alt-Esc) will instantly take one back to their application). It's been reported that productivity in Redmond, Washington has dipped precipitously since the company-wide beta-test. Productivity managers! Don't let this happen to you! IBM ($64.95).
Circle Reader Service #17.



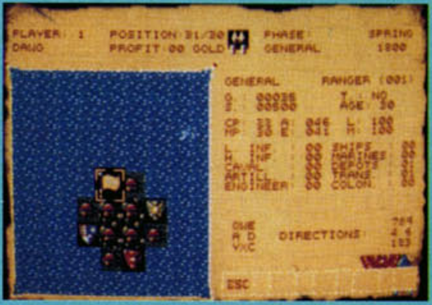
Darklands



Microsoft Golf



Carl Lewis Challenge



Spoils of War



Gobliiins

Psygnosis
Brookline, MA

CARL LEWIS CHALLENGE: If three channels of continuous Olympic coverage weren't enough for your ravening track and field appetite, then get interactive with this collection of events in the thumb blistering tradition of athletic action gaming. There is a small strategy element to the game as one must design a five week training regimen for his/her athletes prior to the competition to maximize an athlete's agility, speed, power and stamina, as well as make the strategic assignments of athletes to events from one's stable of Olympic hopefuls. Beyond this, Carl Lewis is pure action-gaming requiring world class levels of eye-hand athleticism. IBM. Circle Reader Service #18.

R.A.W. Entertainment, Inc.
3027 Marina Bay Drive, Suite 110
League City, TX 77573-2772

SPOILS OF WAR: RAW Entertainment, the international talent scout for independently developed strategy games, has discovered a solid product in this game of conquest from the German Design Group. As previewed in issue #99, this is a sometimes dauntingly complex mix of exploration, colonial administration, and strategic or tactical warfare for one to four human or computer opponents. A map generation feature ensures that aspiring conquistadors always have "New Worlds" to oppress. Amiga, IBM ($59.95). Circle Reader Service #19.

Sierra On-Line
Coarsegold, CA

GOBLIIINS: No, the copyeditor isn't on vacation; the title of this bizarre French import has three 'eyes' in it; one for each of the zany little gobliiins the

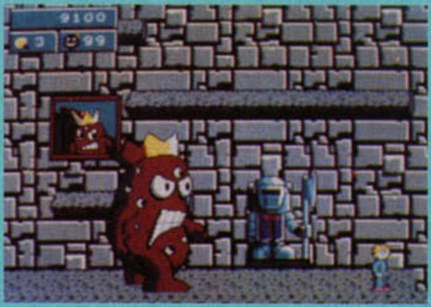
player controls while trying to figure out the goofy puzzles in this 3-D Sierra-style world. Each of the three goblins has a gift; Hooter casts a general magic spell with varying effect; Bobo is a pugilist and a rope walker; and Dwayne is the only one with any manual dexterity, it seems, as he is the only one of the triplets who can pick-up and use an item. Players must figure out how to use these skills, and in what order, to bypass the obstacles that lie in the path to their goal (which, by the way, is to save their king from the voodoo tortures of some nasty gobliiin hater). This game is heavy on the cute factor as there are dozens of silly animations (including a wacky intro sequence) to accompany nearly every move the gobliiins make. Even when idle, these guys will play with yo-yos and yawn and wink and what not, and when the player fouls up, well, he'll catch non-verbal hell from this unforgiving bunch. A game hasn't tipped the cutesie scale this far since *Lemmings*. IBM. Circle Reader Service #20.

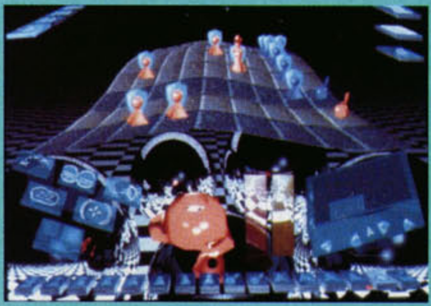
Softdisk Publishing
606 Common St.
Shreveport, LA 71101

KEEN DREAMS: King Boobus Tuber, the evil potatoe (we have to be careful, the Grand Old Party might legislate a spelling change) monarch, has captured innocent children and subjected them to the tortures of deranged vegetables (the end result of genetically engineered foods, no doubt), in this link between the two previously published Keen trilogies. Developed for Softdisk by Id Software (the deranged bunch responsible for *Wolfenstein 3-D*) this is yet another action romp through Keen's disturbed world. Will Keen succumb to the (spelling?) vices of the potatoe fiends? Will his sweet disposition be spoiled by Sour Grapes? Will he, like all strong leaders of the free world, have the strength to 'just say noe' to the Broccolashes? Register this shareware and see. Warning: may induce vegetative states. IBM ($14.95). Circle Reader Service #21.

Three-Sixty, Inc.
Campbell, CA

THEATRE OF WAR: As previewed in CGW#97, this is an abstract, real-time, somewhat chesslike sort of strategy game, that defies all attempts at a succinct description. As difficult as it may be to describe its mechanics, the graphics are even more so: geometric figures transform into animated creatures that fight out the action on a 3-D polygonish board seen from a side-long perspective with command icons floating in virtual space. Even if abstract strategy is not one's mug of Sanka, this is one to see at the software store. IBM ($49.95). Circle Reader Service #22.


Keen Dreams


Theatre of War



Floor 13


Heimdall



Realms

Virgin Games, Inc.
Irvine, CA

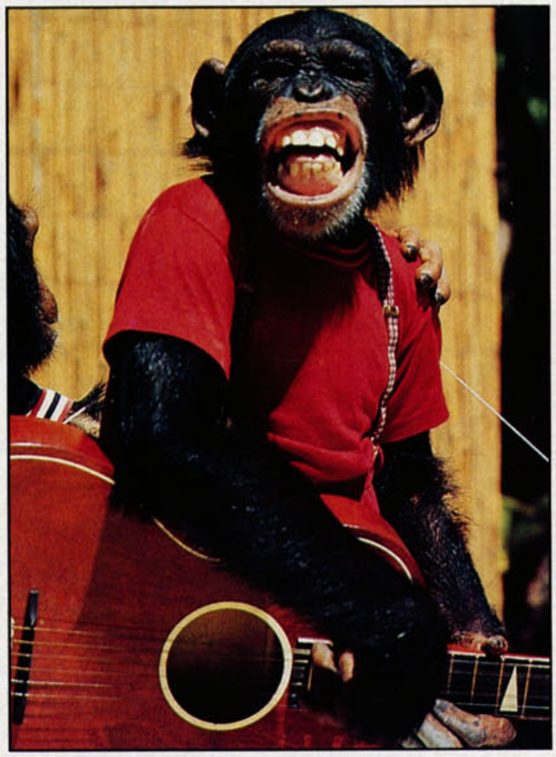
FLOOR 13: Murder, intrigue, scandal—according to this paranoiac computer game, these are the necessary element of a strong democratic government. Players take the role of the head of a secret agency behind the British government, responding to events that threaten the standing of the government in relation to 'them'—the opposing political party. Players assign agents to trail, tap, slander, abduct, interrogate and murder political dissidents. It's a do-or-die task for the player, as incompetence will lead to a short flight out of the 13th floor window of one's office. IBM ($19.99). Circle Reader Service #23.

HEIMDALL: The mythos of the Icelandic Eddas has sure made a resurgence in computer role-playing lately. Here, once again, the gods of Odin's Hall have found themselves duped by the evil Loke and are forced to choose a human to save their deified derrieres. The player chooses six human heroes out of the 30 provided and leads them through this rather large R-Ping space of mythical inspiration. The view is the popular 3-D isometric view, and the combat system is somewhat like that of *Elvira.* The generation of Heimdall's (the hero) initial traits is based upon three action sequences wherein one must chop off a barmaid's blonde ponytails with throwing axes, catch a greased pig, and rob a ship of its gold while fighting off hoards of pissed-off sailors. Amiga, IBM ($39.99). Circle Reader Service #24.

REALMS: This European strategy game is a potpourri of recognizable elements from several recent releases. There's the requisite, vogue and hackneyed *Populous* perspective and interface, the city-by-city strategic elements of SSG's *Warlords*, and the real-time, tactical battle system of Microprose's *Sword of the Samurai*. While the interface is a bit cumbersome, the game appears to have some depth, and may prove a challenge to the casual strategist. Amiga, Atari, IBM($39.99). Circle Reader Service #25. CGW

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CONVERSIONS

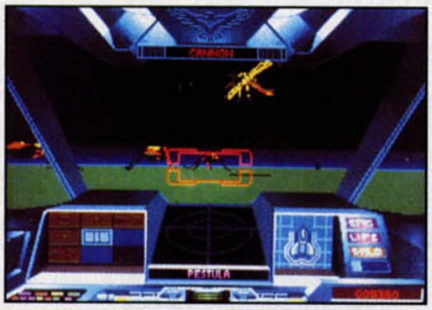
AMIGA:
Nova 9 (Dynamix)

IBM CD-ROM:
Kings Quest V (Sierra)

IBM:
Birds of Prey (Electronic Arts)
Tristan Pinball
(Amtex Software Corporation)

MACINTOSH (Color only):
Space Quest I (Sierra)

MACINTOSH (B/W & Color):
Command HQ (MicroPlay)
Pools of Darkness (SSI)
Where in America's
Past is Carmen Sandiego?
(Broderbund)



Nova 9



Kings Quest V



Birds of Prey



Space Quest I



Tristan Pinball



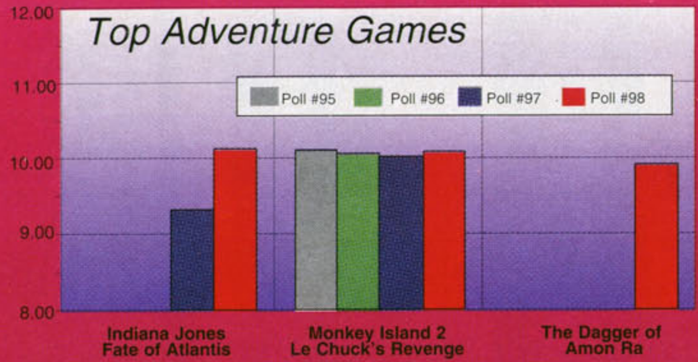
Command HQ

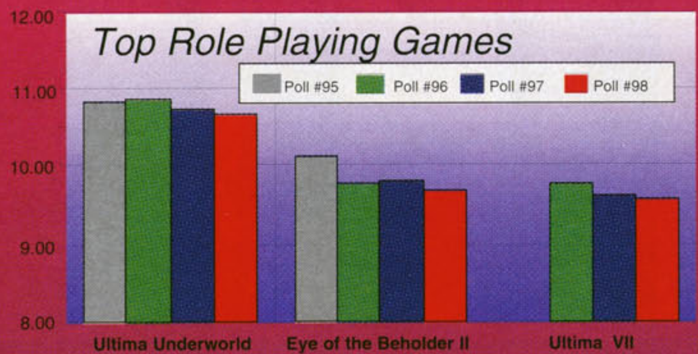


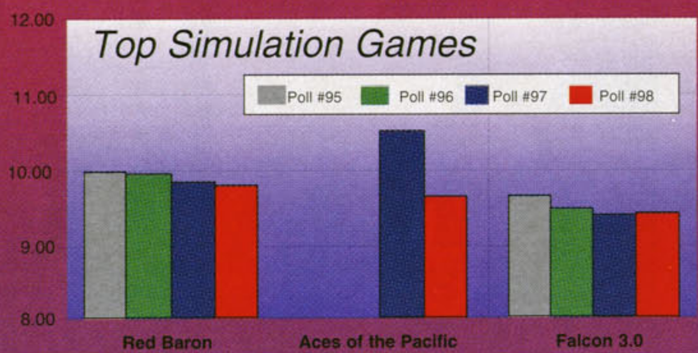
Where in America's Past is
Carmen Sandiego

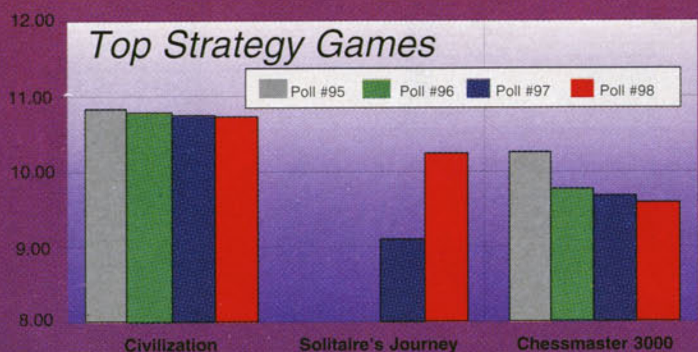


Pools of Darkness







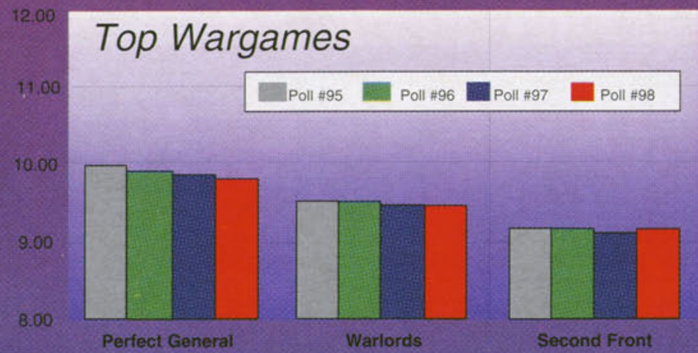


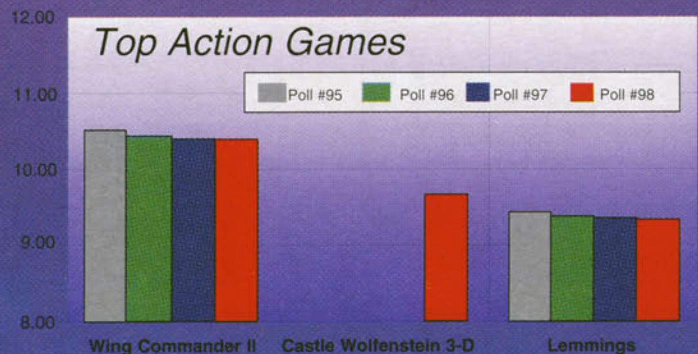
Top 100 Games

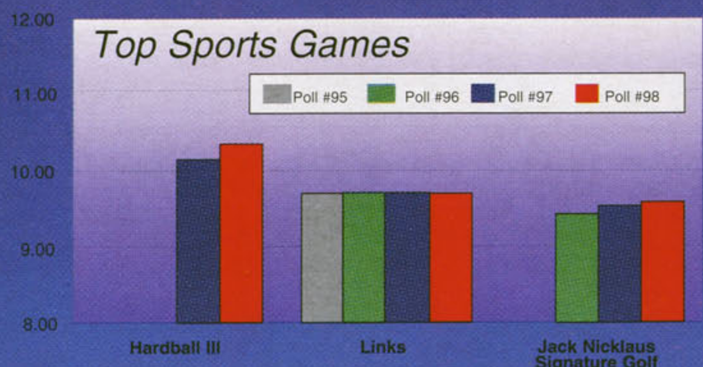
Reader Poll #98
COMPUTER GAMING WORLD
The Magazine of Interactive Entertainment

Review

1	Civilization	MicroProse	ST	10.73
2	Ultima Underworld	Origin	RP	10.65
3	Wing Commander II	Origin	AC	10.40
4	Hardball III	Accolade	SP	10.38
5	Solitaire's Journey	QQP	ST	10.24
6	Indiana Jones: Fate of Atlantis	LucasArts	AD	10.16
7	Monkey Island 2: Le Chuck's Revenge	LucasArts	AD	10.08
8	Red Baron	Dynamix	SI	9.92
	The Dagger of Amon Ra	Sierra	AD	9.92
10	The Perfect General	QQP	WG	9.81
11	The Secret of Monkey Island	LucasArts	AD	9.70
12	Links	Access	SP	9.69
	Aces of the Pacific	Dynamix	SI	9.69
14	Eye of the Beholder II	SSI	RP	9.67
15	Castle Wolfenstein 3-D	Apogee	AC	9.64
16	Chessmaster 3000	Software Toolworks	ST	9.60
	Jack Nicklaus Signature Golf	Accolade	SP	9.60
18	Tetris Classic	Spectrum HoloByte	ST	9.59
19	Ultima VII	Origin	RP	9.56
20	Might & Magic III	New World Computing	RP	9.55
21	Warlords	SSG	WG,ST	9.49
22	Falcon 3.0	Spectrum HoloByte	SI	9.43
23	Lemmings	Psygnosis	AC	9.37
24	Secret Weapons of the Luftwaffe	LucasArts	SI	9.35
25	Second Front	SSI	WG	9.19
	Wings	Cinemaware	AC	9.19
	Gateway	Legend	AD	9.19
28	Conflict: Korea	SSI	WG	9.17
29	Populous II	Electronic Arts	ST	9.16
30	Eye of the Beholder	SSI	RP	9.13
31	Gunship 2000	MicroProse	SI	9.12
32	Quest for Glory II	Sierra	AD,RP	9.11
	The Castle of Dr. Brain	Sierra	AD	9.11
34	Silent Service II	MicroProse	SI	9.08
35	Chuck Yeager's Air Combat	Electronic Arts	SI	9.06
36	Bane of the Cosmic Forge	Sir-Tech	RP	9.05
	Battlehawks 1942	Lucasfilm	AC,SI	9.05
38	Red Storm Rising	MicroProse	SI	9.04
	Conquests of the Longbow	Sierra	AD	9.04
40	Ultima V	Origin	RP	9.00
	Quest for Glory	Sierra	AD,RP	9.00
	The Lost Admiral	QQP	ST	9.00
43	Space Quest IV	Sierra	AD	8.98
	Western Front	SSI	WG	8.98
45	Space Quest III	Sierra	AD	8.97
	Police Quest 3	Sierra	AD	8.97
47	The Adventures of Willy Beamish	Dynamix	AD	8.96
48	Mech Warrior	Activision	ST,SI	8.95
	Wasteland	Electronic Arts	RP	8.95
50	Sword of Aragon	SSI	WG,ST	8.94







	Pools of Darkness	SSI	RP	8.94
52	Overrun	SSI	WG	8.93
53	Oh, No! More Lemmings	Psygnosis	AC	8.92
54	Falcon	Spectrum HoloByte	SI	8.90
	F-117A	MicroProse	SI	8.90
56	Jack Nicklaus Unlimited Golf	Accolade	ST	8.89
	Rise of the Dragon	Dynamix	AD	8.89
	Martian Memorandum	Access	AD	8.89
59	NFL Challenge	XOR Corporation	ST	8.87
60	Romance of the 3 Kingdoms	Koei	ST,RP	8.86
61	Indianapolis 500	Electronic Arts	SP	8.85
	Super Tetris	Spectrum HoloByte	AC,ST	8.85
63	Populous	Electronic Arts	ST	8.84
64	Elvira	Accolade	RP	8.82
65	Command HQ	MicroPlay	WG,ST	8.81
	Might & Magic II	New World Computing	RP	8.81
	Rules of Engagement	Mindcraft	ST	8.81
	Tracon	Wesson International	ST	8.81
	V for Victory: Utah Beach	Three-Sixty Pacific	WG	8.81
70	The Magic Candle	Mindcraft	RP	8.80
71	Gateway to the Savage Frontier	SSI	RP	8.79
72	Hoyle Book of Games, Vol. 3	Sierra	ST	8.78
73	Bard's Tale III	Electronic Arts	RP	8.77
74	Heart of China	Dynamix	AD	8.75
75	Covert Action	MicroProse	AC,AD	8.73
76	Battles of Napoleon	SSI	WG	8.72
	Battlechess	Interplay	ST	8.72
78	Breach 2	Omnitrend	ST,RP	8.71
	Starflight II	Electronic Arts	RP	8.71
	4-D Boxing	Electronic Arts	SP	8.71
81	Neuromancer	Interplay	AD	8.70
82	F-15 Strike Eagle II	MicroProse	SI	8.69
83	Action Stations	RAW Entertainment	WG	8.68
84	Typhoon of Steel	SSI	WG	8.67
	Curse of the Azure Bonds	SSI	RP	8.67
86	NFL Pro League Football	Micro Sports	SP	8.66
87	Indiana Jones/Graphic Adv.	LucasArts	AD	8.65
	Ballistyx	Psygnosis	AC	8.65
89	PGA Tour Golf	Electronic Arts	SP	8.64
90	Armada 2525	Interstel	ST	8.63
91	Wayne Gretzky Hockey	Bethesda Softworks	AC,ST	8.62
	Megafortress	Three-Sixty Pacific	SI,ST	8.62
93	Pool of Radiance	SSI	RP	8.61
94	Tony LaRussa's Ultimate Baseball	SSI	SP	8.60
95	King's Quest IV	Sierra	AD	8.59
	Wide World of Sports Boxing	Data East	SP	8.59
97	Powermonger	Electronic Arts	ST	8.57
	Buck Rogers	SSI	RP	8.57
	Carrier Strike	SSI	WG	8.57
100	Chessmaster 2100	Software Toolworks	ST	8.56

The Computer Gaming World Poll

A monthly survey of the readers of Computer Gaming World Magazine.

Prepared by Golden Data Services.

PC Research Hits List of Top-Selling Software June, 1992

PC Games (MS-DOS)

Rank Title and Source

1. Aces of the Pacific (Sierra On-Line)
2. Links (Access)
3. Indiana Jones: Fate of Atlantis (LucasArts)
4. Powermonger (Electronic Arts)
5. Civilization (MicroProse)
6. Hardball III (Accolade)
7. Gunship 2000 (MicroProse)
8. F117A Stealth Fighter 2.0 (MicroProse)
9. Dagger of Amon Ra: Laura Bow II (Sierra On-Line)
10. Dark Seed (Merit)
11. A-Train (Maxis)
12. Monopoly (Virgin Games)
13. Dark Queen of Krynn (Strategic Simulations, Inc.)
14. Star Trek 25th Anniversary (Interplay)
15. Sim City (Maxis)
16. Ultima VII (Origin)
17. Gateway (Accolade)
18. Falcon 3.0 (Spectrum HoloByte)
19. Police Quest III (Sierra On-Line)
20. Flight Simulator 4.0 (Microsoft)

Amiga Games

Rank Title and Source

1. 688 Attack Sub (Electronic Arts)
2. Links (Access)
3. Dark Queen of Krynn (Strategic Simulations, Inc.)
4. Black Crypt (Electronic Arts)
5. AD&D Eye of the Beholder (Strategic Simulations, Inc.)

Macintosh Games

Rank Title and Source

1. Might & Magic I & II (New World)
2. Prince of Persia (Broderbund)
3. Flight Simulator 4.0 (Microsoft)
4. Lost Treasures of Infocom (Activision)
5. Red Baron (Sierra On-Line)

Home Education (MS-DOS)

Rank Title and Source

1. Where in the World is Carmen Sandiego (Broderbund)
2. Mavis Beacon Teaches Typing (Software Toolworks)
3. Where in the U.S.A. is Carmen Sandiego (Broderbund)
4. New Math Blaster Plus (Davidson)
5. Playroom (Broderbund)
6. Algeblaster Plus (Davidson)
7. Body Works (Automap)
8. Mickey's ABCs and Sound Source Pak (Disney)
9. Where in Time is Carmen Sandiego (Broderbund)
10. Your Personal Trainer for the S.A.T. (Davidson)

This list is based on units solf by Software Etc., Babbages, Waldensoftware and Electronics Boutique. For more information, please contact PC Research at (703) 435-1025.

What You Have Been Playing Lately —

The Feedback Forum of Reader Response

Beginning in issue #93 we added a new question to our CGW Poll cards. Along with the list of games to be rated (which is the basis for the Top 100 Chart and serves as a lasting indication of which games are quality works and which are not) we also wanted to know which games have grabbed you, which are hot, which keep you up into the wee hours, which have become the foundation of your spouse's divorce filing. The following list was composed by adding up the number of times a game was written into the blank line provided on the CGW Poll card and putting them into rank. Since the data for this column will not be accumulated over time, this list will be more dynamic and will serve as a good indication of just which games have been responsible for the greatest loss in GHP (gross human productivity).

Feedback from CGW #97, August 1992:

1. Civilization (MicroProse)
2. Ultima VII (Origin)
3. Aces of the Pacific (Dynamix)
4. Wolfenstein 3-D (Apogee)
5. Ultima Underworld (Origin)
6. Links 386 (Access)
7. Solitaire's Journey (QQP)
8. The Perfect General (QQP)
9. Wing Commander II (Origin)
10. Hardball III (Accolade)

Interesting responses of the month:

"Nothing, waiting for F-15 Strike Eagle III"
Microsoft Windows 3.1 *[Ed: Passable graphics, smooth interface, but it just doesn't grab me.]*
"Not this month."
Jill of the Jungle
Super Breakout
Altered Destiny

Quotes of note:

"My wife wants to change her name to Civilization in hope of getting equal time."
- Scott Petersen. Highland, CA
[Ed: Either that or she may resort to a little "Industrial Sabotage" of her own. Better sit on the wire cutters.]

"I have all 3 of the QQP titles. As far as I am concerned, their record is 3-0 with 3 KO's, and the *Perfect General* is their knockout punch. Ole!!"
- Jay Carter. Ovett, MS

"I like Aces [of the Pacific] but sometimes I can get up and mix a drink between frames."
- Clint McCoy. Ellsworth AFB, SD
[Ed: Is that so? Well, then you'd better make Damon Slye a double.]

"Editor, will you be my friend?"
- Greedo. Mos Eisley
[Ed: I'm sorry Jaba the Editor™ is in a meeting. Please take a seat in this gaping sand pit and someone will be with you in a moment.]

"Hi. I'm Ariel Gross and I live in Phoenix, Arizona. I'm 13 years old and love your magazine. I had a subscription but my dad cancelled it. I think we're going to get another."
- Ariel Gross. Phoenix, AZ
[Ed: Another dad, we presume.]

"Falcon 3.0 is hands-down the most realistic flight sim available today, and a triumph for Spectrum HoloByte. I think that its steep learning curve has scared off many potential pilots, however. Stick with it, it's worth the time."
- Andrej Gaspari. Shrub Oak, NY

COMPUTER GAMING WORLD'S HALL OF FAME

The games in *Computer Gaming World's Hall of Fame* have been highly rated by our readers over time. They have been rated for their impact on the computer gaming hobby during their peak period of influence and acceptance by our readership. Note that the dates listed for each game are the copyright dates and may precede the actual release dates. Specific formats listed are those which *CGW* has in its possession. Each month, we will publish a brief description of some of these classic games as part of this listing.

The Bard's Tale **(Electronic Arts,** 1985) Many formats

Chessmaster **(Software Toolworks,** 1986) Many formats

Dungeon Master **(FTL Software,** 1987) Amiga, Atari ST, IBM

Earl Weaver Baseball **(Electronic Arts**, 1986) Amiga, IBM, Macintosh

Empire **(Interstel,** 1978) Amiga, Atari ST, Commodore 64, IBM

F-19 Stealth Fighter **(MicroProse**, 1988) IBM

Gettysburg: The Turning Point **(Strategic Simulations, Inc.**, 1986) Amiga, Apple, C-64, IBM

Gunship **(MicroProse**, 1989) Amiga, C-64, IBM

Harpoon **(Three-Sixty Pacific**, 1989) Amiga, IBM, Macintosh

Kampfgruppe **(Strategic Simulations, Inc.**, 1985) Many formats

King's Quest V **(Sierra**, 1990) Amiga, IBM

M-1 Tank Platoon **(MicroProse**, 1989) Amiga, IBM

Mech Brigade **(Strategic Simulations, Inc.**, 1985) Many formats

Might & Magic **(New World Computing**, 1986) Apple, C-64, IBM, Mac

M.U.L.E. **(Electronic Arts**, 1983) Atari 8-bit, C-64

Pirates **(MicroProse**, 1987) Many formats

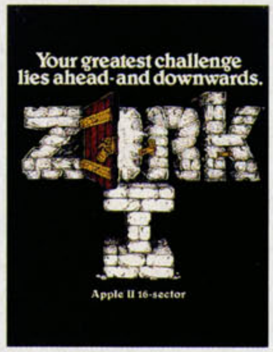
Railroad Tycoon **(MicroProse**, 1990) Amiga, IBM, Macintosh

SimCity **(Maxis**, 1987) Many formats

Starflight **(Electronic Arts**, 1986) Amiga, C-64, IBM, Sega

Their Finest Hour **(LucasArts**, 1989) Amiga, Atari ST, IBM

Lucasfilm (now **LucasArts**) electrified the gaming world with Larry Holland's second action game/combat flight simulator. The realistic bit-mapped graphics were a big hit with gamers who were tired of the polygon-filled look of other flight simulators and the flight model was more realistic than that used in its predecessor (*Battlehawks 1942*). In addition, gamers loved the ability to fly on both sides of the conflict and the capacity to take on the role of a crew member, as well as a pilot.



Ultima III **(Origin**, 1983) Apple, Atari ST, C-64, IBM

Although Lord British often refers to the first three *Ultima*s as a trilogy (and they are marketed as such), *Ultima III* was really the first one to have a coherent plot beyond the typical dungeon romp. It set the tone for the future series and encouraged Lord British to try to accomplish more, in terms of role-playing, in the next trilogy of releases. Also, when the *Ultima* series was to be converted to the Nintendo platform, *Ultima III* was the game which was to be known as *Ultima* to hundreds of thousands of cartridge gamers.

Ultima IV **(Origin**, 1985) Amiga, Apple, Atari ST, IBM

The world of CRPGs was revolutionized by both the character-generation system in *Ultima IV* and the concept of Avatarhood. From the time players responded to the ethical choices depicted in the introductory sequence to the time they had completed the quest, personal accountability played a major role in either the successful completion or failure of the game. For the first time, ethics had become a significant part of a computer game and non-player characters reacted to player characters on the basis of said character's reputation rather than merely responding to his/her immediate actions.

Ultima VI **(Origin**, 1990) Amiga, IBM

With this release, Lord British brought defined objects and realistic world models into the demesne of the CRPG. The moral lesson in the story was related to the idea of avoiding racial prejudice and the game regularly placed the player's character into situations where he/she would have to grapple with the forces which lend themselves to reinforcing prejudice. Along with the new look and the six-button interface, *Ultima VI* showed that Lord British was nowhere near finished with the world of Britannia.

War in Russia **(Strategic Simulations, Inc.**, 1984) Apple

The first "monster" game on the computer, *War in Russia* depicted the action on the Eastern Front during World War II. Experienced gamers came to discover that the AI could be faked out easily in an early move of subterfuge, but the game continued to have popularity because of its scale, subject matter and suitability for playing by mail (i.e. the save positions were in the right spot for players to be able to save their move, send a disk and wait for the return of the disk for their next move). It was popular among wargamers for as long as the Apple II remained alive.

Wing Commander **(Origin**, 1991) IBM, Sega

For months, *Wing Commander* held the highest rating in CGW Poll history. It was the ultimate action game in many ways. First, it combined the smooth performance of a polygon-filled flight simulator with convincing bit-mapped overlays that were artistically superior to the ordinary flight simulation. Second, it was a "shoot-'em-up" that allowed gamers to shoot at everything (even their mother ship!). Third, it wrapped the intense action, complete with a soundtrack that sped up and slowed down according to the pace of the action, with nicely paced cinematic story sequences to give a breather to even the hardiest joystick jockey.

Wizardry **(Sir-Tech Software**, 1981) Many formats

Wizardry was almost an instant classic. It offered a first-person perspective dungeon crawl using line and fill technology, as well as characteristics, spells and skills with which "people and paper" role-players could identify. Forcing players to save games at "inns" reinforced the suspended disbelief that one was actually exploring a dungeon in a real world where one's character had real needs. Plus the spells had interesting names that added to the suspended disbelief with regard to the magic system.

Zork **(Infocom**, 1981) Many formats

The Great Underground Empire was launched with the first publication of *Zork* on a home computer (the Apple II) in 1981. **Infocom** established a rich genre of quality games where the graphics were "in the mind" rather than presented on the screen. The classic Infocom games became the benchmarks for puzzle-driven adventure games and the lavish touches of zany humor were just exactly right for providing comic relief whenever the gamer felt most frustrated. At the time the *CGW Hall of Fame* was established, the *Zork* games were past their prime and had fallen very low on the Top 100 ratings list. Since a high rating was necessary in order to be inducted into the Hall of Fame, *Zork* was not one of the original inductees. *Zork* has stood the test of time, however, and the rating criterion is hereby waived in favor of honoring this venerable classic. **CGW**

A CGW Glossary



by Johnny L. Wilson

State of the Magazine: Over the years, we've adapted or developed quite a few terms, phrases, and acronyms to describe the world of computer gaming. Sometimes, we are queried as to what we mean by these terms, particularly when they are adapted from foreign languages or used with different nuances than the standard dictionary definition (or even differently than other magazines covering the same subject). Here then, as we reach the 100th issue milestone, is our first attempt at the *Computer Gaming World* glossary.

Abstract: A brief summary of an article from another publication which is designed to suggest the salient points of said article and encourage interested readers to obtain a copy and read the full article.

Action Game: Computer games that emphasize hand-eye coordination and reflexes.

Adventure Game: Computer games that allow one to take an alter ego through a storyline or series of events.

AI: Ostensibly meaning "artificial intelligence," it is actually used as a quick and dirty term for the computer opponent routines.

Busy-Bath Software: Computer games where there is far more exploration than meaningful interaction. Often applied to children's games.

CES: The acronym for the Consumer Electronics Show, a major electronics industry exposition held in the Winter and Summer of each year and providing a venue for software publishers to unveil their upcoming computer games.

Cheese Screen: A term inspired by behavioral psychology to refer to the positive reinforcement, in terms of fanfare, that gamers (particularly adventure gamers and CRPGers) receive upon successfully completing the game.

Control Freak: The type of gamer, particularly found among wargamers, who wants to control every aspect of every individual unit or person, regardless of scale, era or realism.

CRPG: Computer role-playing games are a subset of adventure games which are based on character development (usually involving numerical values for attributes).

Cyburb: 1) the multi-player on-line gaming environment or telecommunity which enables gamers to socialize and interact so successfully in a simulated "reality" that it sometimes feels more real than one's own physical neighborhood; 2) a place where gamers make friends they've never seen.

Designer Notes: Articles from a member of the design team which express something about how a computer game came to be or is coming to be. These articles are intended to share something about the philosophy behind or the inner workings of a game and are *not* supposed to be virtual press releases from the marketing department of a software publisher.

Fred: Scorpia's grue friend, an original cast member from *Zork* and the bartender at the tavern of the mind (*The Scorpion's Tale*) where she gives hints on adventure games and CRPGs.

Grognard: A noun derived from the French verb, grogner. The verb means "to complain" and referred to the veteran French soldier who always grumbled as they plodded toward battle, but were always dependable in a crunch. Grognards tend to complain about everything in their games, but they always seem to be buying and playing new ones. Hence, we mean those who are determined to play whether a product is attractive, well-designed or interesting, simply because of their personal interests.

Hack and Slash: A type of CRPG with an emphasis on repetitive combat, almost to the exclusion of story, character interaction, discovery or management.

Midrash: Taken from the interpretive tradition of Hebrew Scripture, we use the word to refer to the body of literature surrounding a game or period.

NPC: Non-player character (those managed by the computer) in CRPGs.

On-Line Games: Multi-player games where players participate simultaneously or by E-mail (see PBEM) over a local bulletin board system, Local Area Network (LAN), or commercial network (such as *America On-Line, CompuServe, Delphi, GEnie, Multi-Player Game Network, National VideoTex, or Prodigy*).

Paiktography: Taken from the Greek words for play and writing, this synthetic *CGW*ism means "listing of games." We thought it sounded better than the ludicrous "gameography" we might have had to use otherwise.

PBM: Originally part of the boardgaming hobby, Play-By-Mail referred to games where players entered their moves and orders by mail and received their results in the same way: In the computer game hobby, PBM games would be those where players exchanged disks through the mail.

PBEM: Play-By-Electronic-Mail refers to direct connect, bulletin board systems and network games where players enter their moves on their computers and transmit their moves and orders by electronic messaging.

Phased: Computer games in which players (human and/or computers) alternate in activities over the course of a turn.

Real-Time: As opposed to a turn-based or phased computer game, a real-time game requires the player to perform an action or actions where the game-time is passing at the same rate as time outside the game.

Review: An article which examines the finished computer game and evaluates its merit on the basis of the reviewer's experiences. *CGW* reviewers are expected to finish adventure/CRPG games and to win at strategy/simulation games.

Simulation: Computer games based on first-person perspectives of real-world environments (i.e. even science-fiction or fantasy-based simulations must operate according to real-world models).

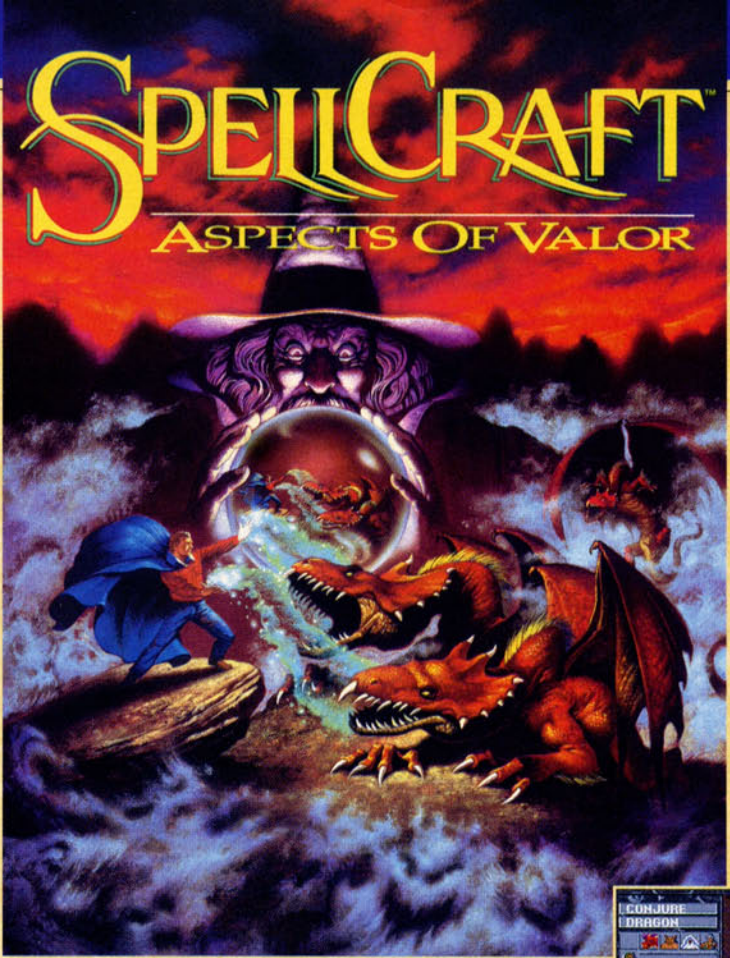
Sneak Preview: An article based on a work-in-progress. *CGW* does not print sneak previews on games with which the writer has not had some hands-on experience. Although the designs sometimes change after the sneak previews are printed, the articles are based upon *our* perceptions of the products and are *not* written by persons involved with the game's design.

Strategy Game: Computer games that emphasize strategic planning and problem-solving.

Turn-Based: Computer games in which each turn represents a period of time which is not equivalent to time outside the game.

Virtual Reality: A full 3D experience where the player is totally immersed in a computer generated world as opposed to interacting with pseudo-3D images on a flat screen.

Wargame: Simulations of historical or futuristic warfare from a command perspective. CGW



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